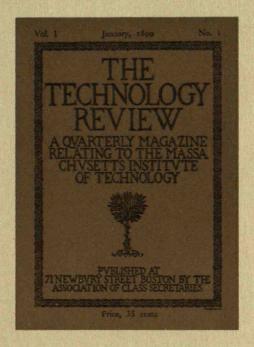
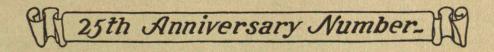
THE THE TECHNOLOGY REVIEW

RELATING TO THE MASSACHUSETTS INSTITUTE OF TECHNOLOGY



JANUARY 1 9 2 4



PUBLISHED BY THE ALUMNI ASSOCIATION

technology review

Published by MIT

This PDF is for your personal, non-commercial use only.

Distribution and use of this material are governed by copyright law.

For non-personal use, or to order multiple copies please email permissions@technologyreview.com.

OLMSTED-FLINT COMPANY

Manufacturers of Leather Belting

CAMBRIDGE - MASSACHUSETTS

Area Used



Leather Belting

Pacemaker is thoroughly standardized. It is cut from the center area of heavy native packer steer hides, tanned by the slow oak bark process. All widths seven inches wide and above are made of backbone strips. The same standards are maintained in all weights of single, double and triple thicknesses.

Pacemaker is guaranteed for 250,000 miles of belt travel.

> See future issues of The Review for practical belt talks."

> > Send for pamphlet

"Ten Times Around The World"

Stone & Webster Construction Is Victor's Choice

VICTOR'S magazine, The Voice of the Victor, referring to new construction at the big Camden works where Victrola instruments and Victor records are made, says:

- "... building No. 8 rapidly disappearing."
- "... clearing the way for a new record plant."
- "... is being constructed by Stone & Webster, world-famous construction engineers."
- "... will provide greatly increased facilities."

Assurance of satisfaction makes Stone & Webster the choice of industrial leaders. Whatever you make or do, you want the feeling of security that goes with Stone & Webster construction.

STONE & WEBSTER

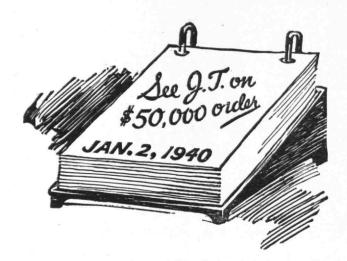
INCORPORATED

DESIGN-BUILD
MANAGE
FINANCE

NEW YORK, 120 Broadway
SAN FRANCISCO, Holbrook Bldg.

CHICAGO, 38 S. Dearborn Street PHILADELPHIA, Real Estate Trust Bldg.

BOSTON, 147 Milk Street



Order your 1940 calendar now.

NOW is the time to plan your work for 1940. What you are doing then will depend a good deal on what you do today and after graduation—and the way you do it.

Obviously, you improve your chances for a big job if you go where big jobs are and will be. That means fit yourself to take a place in some industry with a future.

Planning twenty or more years ahead is all in the day's work, among the telephone companies of America. The electrical generating and manufacturing companies likewise look far into the future.

To put a telephone in every home, to light the 16,000,000 houses that are not yet wired, to devise and promote many appliances for the comfort of man—all this will require decades of time and billions of capital. Chiefly it will need the brains of men.

It has long been said that electricity is in its infancy. That is still true. You are fortunate who can see this industry a little further along on its way to a glorious maturity.

Published in
the interest of Electrical Development by
an Institution that will
be helped by whatever helps the
Industry.

Western Electric Company

This advertisement is one of a series in student publications. It may remind alumni of their opportunity to help the undergraduate, by suggestion and advice, to get more out of his four years.

Number 34 of a series

RELATING TO THE MASSACHUSETTS INSTITUTE OF TECHNOLOGY

Published monthly, from November to May inclusive, and in July at Cambridge, Mass.

Vol. XXVI 25th Anniversary No. 3 Contents for January, 1924 Cover Design by Kenneth Reid, '18 Anniversary The Past Month 122 Today . . . And 25 years ago **Editorial Comment** The Review's Outline of History 126 1899: Prehistoric By Arthur D. Little, '85 1900-1908: Ancient By James P. Munroe '82 128 1908-1917: Medieval By I. W. Litchfield, '85 132 1917-1922: Modern By Robert E. Rogers **DEPARTMENTS** Tech Men in the Public Eye . 138 And 25 years ago . . With The Undergraduates Today 141 And 25 years ago Athletics Today . And 25 years ago . . News from the Alumni Clubs News from the Classes 150 Classified Advertising . . 178 H. E. LOBDELL . . . Editor E. F. Hodgins . . . Managing Editor . . Contributing Editor R. E. ROGERS . R. S. STEVENS . . . Advertising Manager PUBLISHED BY THE ALUMNI ASSOCIATION George L. Gilmore, '90, President Arthur T. Hopkins, '97, Secretary Orville B. Denison, '11, Executive Secretary Entered as Second Class Mail Matter at the Post Office

at Boston, Mass.

Copyright, 1924, by The Technology Review.

TERMS:—\$3.00 a year, in advance; a single copy, 50 cents. To undergraduates of the Massachusetts Institute of Technology \$2.25 per year, in advance, a single copy, 30 cents. Canadian and foreign postage, 50 cents per year additional. Back numbers over three months old, 60 cents each. Instructions for change of address should be sent three weeks before the date they are to go into effect. Both old and new addresses should be given.

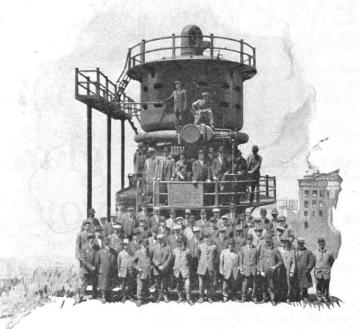
We are always glad to go over our investment problems with you

Write or telephone our nearest office if inconvenient for you to call in person

Established 1848

NewYork Boston Chicago Higginson & Co. London

A seven days wonder in 1903, but already outgrown in 1909-sorapid is the march of electrical development.



A monument to courage



The total capacity of the steam turbine generators produced by the General Electric Company is equal to the working power of 170 million men. More and more the hard tasks of life are being transferred from human shoulders to the iron shoulders of machines.

This machine is a Curtis Steam Turbine Generator. Many called it a "piece of folly" in 1903. It was the largest turbine generator ever built up to that time.

Today General Electric Company builds steam turbine generators ten times as big as this pioneer; and the "piece of folly" is preserved as a monument to courage.

GENERAL ELECTRIC

THE THE TECHNOLOGY REVIEW

RELATING TO THE MASSACHUSETTS INSTITUTE OF TECHNOLOGY

Vol. XXVI

JANUARY, 1924

No. 3

Anniversary

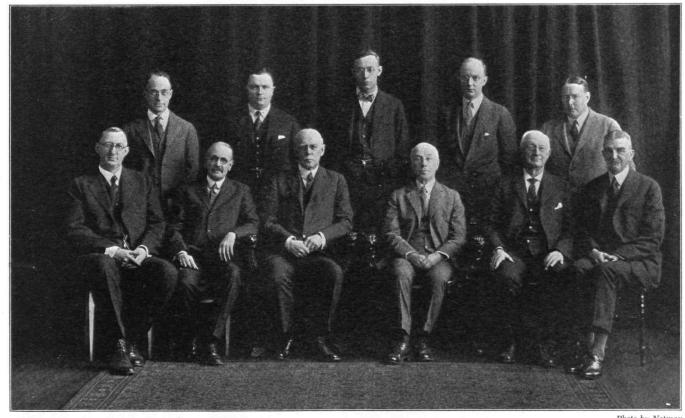
This is our Silver Jubilee. It was in January, 1899, that The Technology Review, whose cover was smaller and browner than now, made the first public appearance of its career. Now, so soon, we are come to January, 1924, and find ourselves a quarter-century old.

This is no small time as publications count it. We want our younger readers to know that we have a solid and substantial history to our credit, and so we present to them this month as the product of four able pens the story of The Technology Review from its founding to its present. You will find it

beginning on page 127.

Our several departments, you will notice, wear two faces each. The Past Month, In the Public Eye, With the Undergraduates, and the like appear before you first as of the present day, and then, cinema-like, flash back to the reportings of 1899, suitably embellished with tintypes. It will surprise you to know what was going on in those brave days.

A quaint age, wasn't it? But just wait for the Fiftieth Anniversary Number, in 1949!



PAST AND PRESENT

Photo by Notman

This remarkable photograph groups together all those who have had a hand in the founding of The Review twenty-five years ago or the administering of it since then. Left to right, the eleven call off as follows: Standing—Walter Humphreys, '97, second Editor, and for sixteen and one-half years Secretary-Treasurer of the Alumni Association; H. E. Lobdell, '17, the sixth and present Editor; E. F. Hodgins, '22, present Managing Editor; R. S. Stevens, '17, present Advertising Manager; R. E. Rogers, the fifth Editor and the present Contributing Editor. Sixting—A. T. Hopkins, 97, the first Editor, and now Secretary-Treasurer of the Alumni Association; W. B. Snow, '82, formerly in charge of advertising; A. D. Little, '85, Chairman of the first Committee on Publication; J. P. Munroe, '82, third Editor, and likewise a member of the first Committee on Publication; G. Frank Allen, '72, the third member of the Committee, and I. W. Litchfield, '85, the fourth Editor.

THE PAST MONTH Today

THE second William Thompson Sedgwick Memorial Lecture will be held in Huntington Hall, of the Rogers Building, on January 25, 1924, at 4.30 p.m. The lecturer will be Dr. William H. Welch, Director of the School of Public Health of Johns Hopkins University. He has chosen as his subject, "The Foundation of Public Health."

The William Thompson Sedgwick Memorial Lectureship is the first of its kind to be established at the Institute. It came into being for the purpose of commemorating the services of William Thompson Sedgwick to the cause of Biology and Public Health. These lectures held in memory of the late Head of the Department of Biology and Public Health are to be delivered from year to year by men of distinguished eminence in the biological sciences. Samuel C. Prescott, '94, Professor Sedgwick's successor as Head of the Department, C.-E. A. Winslow, '98, of Yale University, Edwin O. Jordan, '88, of the University of

Chicago, George C. Whipple, '89, of Harvard University, and Gary N. Calkins, '90, of Columbia University, are members of the Committee in charge of the lectureship.

Dr. Welch, a life-long friend of Professor Sedgwick, was for many years Dean and Professor of Pathology in the Johns Hopkins Medical School. When the School of Public Health for that university was established by a gift from the Rockefeller Foundation, he became its Director.

The first lecture was given on December 29, 1922, by Professor Edmund B. Wilson of Columbia University on "The Physical Basis of Life." It was recently published in book form by the Yale University Press.

The date of the lecture this year is significant: it is an Anniversary of the death of Professor Sedgwick.

He died suddenly from heart failure three years ago —on January 25, 1921.

N January 5, the Annual Dinner of the Alumni Association will be held in the main hall of Walker Memorial. W. R. Mattson, '13, announces a program which should hold interest for all Technology men. The item of first importance will be the unveiling of the mural mentioned in another column of The Review as being painted by Edwin H. Blashfield, '69. The speakers will be Senator George H. Moses of New Hampshire, Dr. Stratton, and Dr. Allan Winter Rowe, '01. Franklin Collier, the gifted and versatile cartoonist of the Boston Herald, will be present to do rapid-fire sketches of speakers and prominent alumni, for the amusement of the gathering. Tech Show and the Musical Clubs will offer a sample of the divertissements for which they are famous. On all counts the program, as at present outlined, seems to promise unusual interest.

ALDRED lectures have been coming fast and furious. On Friday, December 7, Mr. J. W. Lieb, Vice-President of the New York Edison Company, delivered the third lecture, the title of which was, "The Development of Lighting and Power Service in a Great City." Mr. Lieb, who is a graduate of the Stevens Institute of Technology, was in charge of the first Edison Central Station when it was originally

put in operation in 1882. He is a Knight-Commander of the Crown of Italy. In 1904 he was the President of the American Institute of Electrical Engineers.

trical Engineers.
Four days later

W. E. NICKERSON, '76
Who delivered, on December 11, the fourth Aldred Lecture,
the title of which was, "The Curious Adventures
of a Tech Graduate

Four days later, on December 11, W. E. Nickerson, '76, delivered a lecture whose felicitous title was, "The Curious Adventures of a Tech Graduate." Mr. Nickerson, who was graduated from the Institute as a Chemist, is now a Director of the Gillette Safety Razor Company. In delivering his lecture, Mr. Nickerson did not hold to the precedent of technicality which has been established within the short month since Gerard Swope, '95, spoke on "The Engineer's Place in Society." Rather his lecture was of a personal nature and concerned his experience as an individual in engineering. both before and after his Gillette days. In the estimation of his listeners, Mr. Nickerson seems, so far, to be the star of the series.

One Hundred and First Meeting at the Engineers' Club, with an attendance that ranged in the fifties. The usual account of the meeting is, for reasons of space, omitted from this issue. It will appear in the February issue, thus filling the gap which would otherwise be caused by the omission of the December meeting. The Council authorized this omission at its November meeting.

N December, Orville B. Denison, '11, the Alumni Association's Executive Secretary, penetrated for the first time into the Middle West, visiting Detroit, Cleveland, Cincinnati, Indianapolis and other cities. Herewith is presented his January schedule: January 3 to 6, Schenectady, N. Y.; January 7 to 8, Syracuse, N. Y.; January 9 to 10, Rochester, N. Y.; January 10 to 12, Buffalo, N. Y.; January 13 to 15, Niagara Falls, N. Y.; January 16 to 18, Pittsburgh, Pa.; January 19 to 21, Harrisburg, Pa.; and January 22 to 24, Philadelphia, Pa.

POR the interest of Technology at large, students past and present of the Department of Architecture in both options exhibited during the week of December 3 in the main lobby of the Institute a set of designs and sketches which proved to be of extreme interest. The maturity of design and the excellence of technique exhibited by a number of undergraduate students was a remarkable feature of the exhibition. Reproductions of some of these sketches will appear in a future issue of The Review.

The Faculty of Course IV and the Architectural Society together planned the exhibition.

INSTITUTE men played speaking parts of considerable bulk at the annual meeting of the Engineering Division of the National Research Council held in New York on December 7.

Dr. F. B. Jewett, '03, who is Chairman of the Division of Engineering, made the brief introduction which started the evening. Three of the four fifteenminute addresses were likewise by Technology men: William H. Bassett, '91, spoke on "Researches Affecting Copper and Brass"; Arthur D. Little, '85, spoke on "Research, The Mother of Industry"; Dr. Willis R. Whitney, '90, Director of the Research Laboratory of the General Electric Company spoke on "Scientific Research." An examination of Division projects was made by Professor D. C. Jackson, Head of the Department of Electrical Engineering, whose subject was, "Relation of Quality and Quantity of Illumination to Efficiency in Industries."

John R. Freeman, '76, of the Technology Corporation, was presented with an A. S. M. E. medal for distinguished services. Other Technology men in one way or another represented were Professor Paul Hey-

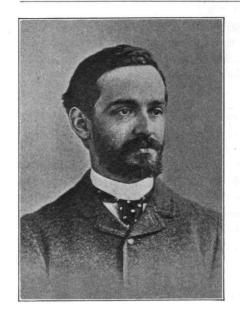
mans of the Department of Physics, Professor F. G. Keyes, Head of the Department of Chemistry, and Professor W. H. McAdams of the Department of Chemical Engineering.

NEW University Club for Boston seems, as the days go by, an increasing probability. Booklets and circulars descriptive of the new project have been mailed to a number of university graduates whom it is believed would be interested in club facilities of a kind not at present found in Boston. The Executive Committee in charge of the project plans the erection of a building at the corner of Trinity Place and Stuart Street. Land, building and equipment are to cost about \$1,800,000. Membership will be limited to 5000 college and university graduates, non-graduates of two years' attendance at some college or university and holders of honorary degrees. Joseph W. Powell is Chairman of the Executive Committee. A Voluntary Committee from Technology, of which Paul D. Sheeline, '19, is Chairman, has been cooperating with the Executive Committee of the project.

25 years and

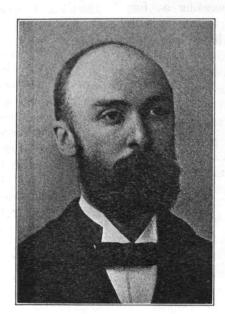
EVERAL promotions and news appointments on the Faculty and Instructing Staff have just been announced. Dr. H. P. Talbot, '85 and Dr. H. O. Hofman have been appointed professors of analytical chemistry and metallurgy respectively. sistant Professor D. P. Bartlett, '86, has been advanced to the grade of associate professor. Mr. H. G. Pearson, instructor in English since 1893, has been appointed assistant professor, and R. R. Lawrence, '95, assistant in Physics of last year becomes instructor in the same department. Two resignations have been accepted: Captain John Bigelow, who rejoins his regiment, the 10th U. S. Cavalry, for active service, and Mr. James Swan, '91, who has formed an industrial connection. Among the new assistants appointed are: Charles B. Breed, '97, in Civil Engineering; William T. Hall, '95, in Analytical Chemistry; Joseph C. Riley, '98, in mechanical engineering; Harrison W. Smith, '97, in Physics; Maurice De K. Thompson, Jr., '98, in Physics; and Arthur A. Blanchard, '98, in Theoretical Chemistry.

R. FRANCIS H. WILLIAMS, '73, was reelected Secretary and member of the Executive Committee for five years at the annual meeting of the Corporation held October 12, 1898. Three new members were elected: Eben S. Draper, '68, of the Draper



AS THEY WERE:

Professors Tyler, Talbot and Burton when The Review was new. Professor Talbot had just been appointed a Full Professor of Analytical Chemistry





HE will of Edward Austin filed in the Suffolk probate office, November 23, 1898, provides that among public bequests of more

than a million dollars, four hundred thousand dollars is to come to Technology. The interest of this bequest is for "needy meritorious students and teachers to assist them in payment of their studies." Mr. Austin was one of the class of prosperous East India merchants and was a great friend of President Rogers. If applied as are our present scholarship funds this bequest will provide eighty full scholarships, nearly doubling the present number available. The first microscope owned by the Department of Biology was his gift.

HE clumsy appellation, The New Building, while sufficiently specific for the present, is a designation bound to become inappropriate and vague with the passing of time. It is fitting that this last addition to the property of the Institute should be named for the man who made its erection possible by a bequest of three-quarters of a million dollars. Henceforth, the new building will be known as The Pierce Building, after the late Henry L. Pierce.

Manufacturing Company, Robert S. Peabody, '68, of Peabody and Stearns, and Elihu Thomson, of the General Electric Company.

The President was authorized to make any needful arrangements for representation of the Institute at the 12th annual convention of the Association of Agricultural Colleges and Experiment Stations, to be held at Washington. The Executive Committee has authorized the purchase of additional apparatus for the gymnasium, with an appropriation of \$133.50.

Club on December 17, (1898,) Professor Sumner spoke on "The Far Eastern Question," treating the general international situation. He showed the strong hold Russia is getting on China by her transcontinental railroads. This system of roads will be complete in about six years, and then Russia will be able to mass troops and send supplies to the Far East much quicker than any other power. She can then dictate the commercial relations of China to the world. This would certainly be a great blow to the merchants of the United States; to prevent which, Professor Sumner proved that it is our duty to retain the Philippines, so as to offset this Russian domination by working in concert with England.

HE first meeting of the Northeastern Section of the American Chemical Society for the season was held at the American House on October 21, the address of the evening on "Recent Developments in Electrochemistry," being given by A. D. Little, '85. Technology men figured largely among the nominees for the ensuing year, A. A. Noyes, '86, being the choice for President and W. R. Whitney, '90, for Secretary. J. W. Loveland, '88, and A. D. Little, '85, were two of the five chosen for the Executive Committee.

EDITORIAL COMMENT Today · · · · · ·

The Year Henry Adams called the "dynamic acceleration of history" as it applies to The Celebrate Technology Review, readers must turn to other pages of this number. In those pages, we think we are not too boastful in saying, they will find a rich reward. Here, upon this one, which is particularly the property of the present guiders of the

magazine's destiny, will be found no pretense of a claim to perspective.

There is no help for this. When in 1899, The Technology Review was first "scattered" (for this felicitous verb we are indebted to a then-current *Tech*) to its public, no present editor was in a favorable situation to view the event. Of the three, one of them was in short trousers, one of them was in long dresses, and one of them was in the Land of Unborn Children. From these awkward angles, none saw the thing happen.

Yet now, at a remove of twenty-five years, they find themselves the sole legatees of Technology's Fourth Estate. They are, at least, aware that something important and [must we use the word?] significant happened in Institute history when Arthur Little, James Munroe, Frank Allen and Arthur Hopkins banded together to bring out this first number. They are, perhaps, even more aware of this now than these four were then. The old, brown-covered quarterly presented itself - let the first page testify - in "an attitude of apology," which indicated that although The Review founders had the courage of their convictions, they had also the convictions of their considerable courage. They thought they were daring. In so busy a day, in so bustling a world, in a community so burdened already with "periodical literature" (now we call it "reading matter") could they hope that The Review would justify its founding? The "vast and complicated affairs of the Massachusetts Institute of Technology" demanded it and they set themselves to meet the demand — but not without setting forth a catalog of possible crimes which should, if committed, bring a swift euthanasia to their project.

Yet what placid days those ones seem now, and how simple were the then "vast and complicated affairs" of Technology To one mind, at least, (an inaccurate one, be it noted) the year 1899 seems compounded of horse-cars, cobblestones, Welsbach burners, Rosina Vokes, the Gibson girl, Florodora, black silk, bustles, Free Silver and Shafter's Army. Were there any affairs in the world that were complicated then?

This age of movies, radios, saxophones and monthly Reviews no doubt thinks not. The clash and clangor of our own day makes this older one seem mute. As manners, morals and modes of thought changed to become noisier, swifter, with less of pains and more of courage, the Institute changed with them. The Twentieth Century lessened for it, as for everything, its provincialism, its narrowness, but also its conscience and its culture.

If the present Technology Review appears to some of its maturer readers as a product of the jazz age, its editors can only plead that it has cut its cloth to style. It is a vastly different Institute which The Review reflects, but it is our claim that the reflection is still as true as it was in 1899. The Technology and The Review of that day, both now seem amateur institutions. Together, they have lost that semblance, and in losing it,

perhaps, they have lost something precious. But if, by becoming less reflective and more intense, they have lost, they may console themselves that they still bear a good gospel, and bear it further. The Institute teaches more subjects to more students. The Review spreads more words to more alumni. For better or for worse (depending upon whether or not you agree with Ralph Adams Cram on the "quantitative standard") the potency of the scientific talisman is yearly impressed upon greater and greater numbers. The Review of today is proud of its opportunity to serve the Institute, however humbly, and is staunch in the belief that it can do it best, not by being the Domesday Book nor the Congressional Record of Technology, nor yet to shape its aims like Punch. "A matter-of-fact attention to the great things that Technology without ostentation and without display, does as its daily work" we once set down as a desideratum. We hold to it. If we can let our pages range decorously from gossip to gospel we shall think that, all in all, we are performing by varied means something similar to the duty which twenty-five years ago the founders set for this magazine.

Boys an institution of reform. The historian, Will Be the student of the changing scene of our small social life will, if his memory reaches back a quarter century, be interested to know that debate is now being held in considerable volume on the question of a secondary reformation. Tech Night is getting out of hand. This outgrowth of the program which superseded the Tudor brutality of the Cane Rush has, itself, fallen into decadence.

Few have yet found fault with Field Day. When the Sophomore and Freshmen classes meet for their crew races, tugs-of-war, relay races, and football games, they present a perfect (dare we say a too-perfect?) spectacle of order, discipline, restraint, decorum. It is not until evening, when most undergraduates attend in a body a party at a previously selected theatre, that trouble begins.

"Attend" is a bad word. There is no such thing as attention in the theatre. It is hardly to be expected that these holiday youths will conduct themselves as if they were listening to their Baccalaureate Sermon, but is it inevitable that they act as if the theatre, the streets of Boston, and a few of its hotels were all a part of their nursery, and the governess was out?

Well, they do. No stevedore, however drunk, would be so careless of his manners. The theatre management begins as early as possible a performance which can be seen but not heard. About 9.30, the dumb show is over, and a vastly relieved stage manager rings down his final curtain upon a group of coryphées, none too hard-boiled to be frightened at their evening. He

then clears his stage of that which was thrown upon it, and calls it a day.

Technology does not. There must be a snake dance in some prominent thoroughfare and a certain amount of sabotage and vandalism wrought upon public houses. A number of students, varying each year, are arrested (with what justice it is impossible to say) and then most of the excitement is over, until the morning papers appear.

That is Tech Night. Let us state emphatically that we do not care to regard it as a moral problem. The actual damage done to student souls, chorus-girl sensibilities, and hotel lobbies is small, is minute. The objection to Tech Night is valid on the count not of morals but of manners. Tech Night needs reformation not because it is wicked, but because it is stupid, a small college show, a spectacle of Siwash.

The desire to curb this unlovely outcrop of mob spirit springs at present not from faculty, not from alumni, but from undergraduates themselves. This year they did two things: they arranged so careful a program for their night that disturbance was reduced to what is, no doubt, its minimum, and they caused to appear at the November meeting of the Alumni Council two spokesmen to state their problem and request alumni help towards its solution.

It is of interest to know what the Council did. First, it requested a brief account of the real happenings of Tech Night just past. Then, when it got its story, it laughed immoderately, in a I-was-young-oncemyself manner, nicely calculated to make the undergraduates think that if that was the way the Alumni felt, next year's holiday might well be made even "better."

But when one undergraduate spokesman said that it did not seem to him quite right to "run an organized booze party and do it in the name of the Institute," the Council stopped laughing and authorized its chairman to appoint a committee for coöperation in solution of the problem. The committee now exists and, we hope, will be of help.

Our apprehension is now that the reformers will not try to reform too much. We want the undergraduates to enjoy their holiday. We favor no blue laws. We deplore nothing but that mob spirit which is the mark of a deficient or ineffective education. Why should this showing be inevitable? Boston sees each year a Harvard-Yale or Harvard-Princeton football game and, when the evening comes, the town is bright and gay. Spirits are loosed but plate glass remains secure. We are going to hope that Technology's present debate will result in cogent proof to our undergraduates that good times and good manners may be made to go hand in hand.

25 years ago.

The total number of students in the catalog now in press is 1,171, a falling off of twenty-seven from last year. This marks the close of a period of nineteen years of uninterrupted growth, during which our numbers have increased from 188 (1878-79) to 1,198 (1897-98). Wonderful as this growth has been, it has involved heavy cares and great sacrifices. urgently needed for other purposes have been over and over again absorbed in the purchase of costly land and the erection of buildings for which architectural effect must be sacrificed to secure the greatest floor space. President Walker's strength and optimism were many a time strained almost to the limit even of his elasticity, to make provision in some sort for ever increasing numbers, - which he would on no account have wished to check.

Since 1893 the tide has slackened. It has no longer been necessary to have more sections and more rooms every year, — as the boy whose clothes fit him but for a month. We may fairly believe that at thirty-three we have reached maturity. Our strength and usefulness should continually increase, even if we never have many more students than now. That there will be any greater falling off than may result from the contingencies of temporary business conditions need scarcely be feared, so long as the Institute maintains its high standards, and the alumni exemplify the value of its training.

The Review's Outline of History

A narrative of the life of The Technology Review from 1899 to 1922

Beginning upon the next page we present to our readers, as the feature of this Anniversary Number, a history of The Review since its inception. The narratives of the four writers, Messrs. Little, Munroe, Litchfield and Rogers, considered together, form a continuous description of the affairs both of the Institute and of the magazine that represents it—the magazine that has for twenty-five years sought in varying ways to state

the Institute's beliefs, voice its hopes, sound its alarms. The articles aim to be not heavily documented official records but anecdotal accounts of the prehistoric, ancient, medieval and modern times through which The Review, in its brief twenty-five years, has passed. They form themselves into a picture that, we think, must interest every alumnus of Technology, whatever the period to which he himself may belong.

1: In Eighteen Ninety-Nine

The founding of The Review, and its first year of publication; being the Prehistoric Section of The Review's Outline of History

The Technology Review had itsconception in the desire to provide a clearing house for Technology

news, a forum for the discussion of Technology affairs, and a dignified medium for presentation of those larger

Vol. I.

interests and problems with which Technology men in their relations to the affairs of the community were particularly concerned. Its aims, as they developed through consideration and discussion, were admirably set forth in the announcement which appeared on the opening pages of its first number — published December 20, 1898, bearing the date of January, 1899.

The proposal for The Review was made at the spring meeting of the Association of Class Secretaries in the preceding year, and a committee, consisting of James P. Munroe, '82, C. Frank Allen, '72, and the pres-ent writer, was appointed to develop and evaluate the plan and consider ways and means. The Committee held numerous meetings at the old Technology Club at 71 Newbury Street.

The need and opportunity for a publication of the sort proposed was recognized by the Committee from the start. Its discussions, therefore, were concerned only with questions relating to the form and character which the publication should take and the means of

bringing it into being. A detail of the first importance was obviously that of the selection of an editor, and the Committee was fortunate in persuading Arthur T. Hopkins, '97, to undertake that responsibility. Colonial Press, of C. H. Simonds & Co., was selected to print the publication, and the advice and suggestions received from them proved most helpful in determining the admirable format of The Review.

The committee reported, at the meeting of the Association of Class Secretaries, on October 17, 1898, when its report was accepted and the Committee reconstituted as the Committee on Publication.

Mrs. William Barton Rogers, whose interest in all Institute affairs was always an inspiration, generously advanced \$1000 as a guarantee fund to provide for

By ARTHUR D. LITTLE, '85

First Chairman, Committee on Publication

preliminary expenses, and with this in hand, the hunt for copy began. There was no dearth of material,

but a singular scarcity of authors, and there was the ever-present necessity of securing an adequate number

JANUARY, 1899 ANNOUNCEMENT

The Technology Review

To a community groaning under an ever increasing weight of periodical literature, a new magazine is forced to present itself in an attitude of apology. Like those college men with whom its interests are to be most closely bound, THE TECHNOLOGY REVIEW must make plain its purposes, its capacity, its determination to be useful, before it can expect to receive recognition from a public too busy to be indulgent. Realizing this, and mindful, too, of the spirit and traditions of the Massachusetts Institute of Technology, THE REVIEW neither throws itself upon the charity of its friends nor prays them to be blind to its shortcomings. Doubtless it will need indulgence, doubtless its attainment will fall much below its aspiration; but if it does not so far succeed in its attempt as to gain support through feelings other than those of simple friendliness, the existence of THE REVIEW cannot be too quickly ended.

Few appreciate how vast and complicated the interests of the Massachusetts Institute of Technology have become. With students, past and present, in every State, and in almost every part of the world, occupied in all manner of work and every civic duty; with studies of great range and courses of wide divergence; with always new and ever more complex problems of education crying for solution, the Institute obviously stands in need of a clearing-house of information and thought, to increase its power, to minimize

The historic first page of The Technology Review

of the all-important advertisements. These last were obtained by dint of much effort, and when authors failed Munroe invariably filled the gap to the greater edification of our subscribers. addition to the announcement, he began in the first number the interesting series of articles presenting transcripts or fac-similes of early documents relating to the Institute. I may further lift the veil of anonymity which covered much of the matter in the first issue, and at this safe distance confess to authorship of the appreciation of President Crafts. The distinctive but somewhat somber cover was designed by T. S. Hapgood, Jr., and Gelett Burgess, '87, contributed a fullpage drawing with characteristic verses.

I remember that issue as containing also a scholarly, distinctly not journalistic, article by Silas W. Holman, '76, then Professor-Emeritus of Physics, on "The Function of the Laboratory" and a complete account of the remodelling of Rogers and the building of Pierce. Then came the departments, the general Institute

news, the Undergraduates (contributed by that perennially enterprising group the Editors of *The Tech*), the Technology Club, alas defunct, the Graduate associations, and last, the class secretaries, beaming modestly with pride in their new venture.

At the annual meeting and dinner of the Alumni Association, held at the Exchange Club, early in January, 1899, copies of the first number of The Review were placed before the members, and the favorable comment there elicited brought gladness and new courage to the hearts of all concerned.

Editor's Note: Following the year of Mr. Hopkins' editorship, here described by Dr. Little, Walter Humphreys, '97, edited The Review for one issue. Mr. Munroe's term of office, described on the following page, began with Vol. II No. 2.

2: From Nineteen Hundred to Nineteen Eight

The second period in The Review's Outline of History; in the days of the Merger

Those thorough going fundamentalists, the Spanish Inquisition, devised, among many other ingen-

ious tortures, a truly scientific one which compelled the unhappy heretic to dissect himself, beginning with the

less and proceeding to the more vital areas of his anatomy. I find myself in similar case in writing about the years when The Technology Review from every standpoint, editorial, publicity and advertising, was "flesh of my flesh."

It is ghostly work: reviewing one's shortcomings of twenty years ago; and, turning over the familiar-and yet wholly forgotten-thousands of pages, I am appalled at my hardihood in undertaking the combined offices of stepfather, nurse and "professor" of deportment to The Review. I adopted the waif at the age of one, when it was moribund from financial starvation, and, with little experience and less leisure, agreed to provide for it a makeshift home in my business office. This was on the dubious supposition that translation from the academic groves of Newbury Street to the harsh atmosphere of trade might keep the poor thing alive. In the very first number of that second volume, the editorial page - which, as the English say, "was me"—entered an alibi by protesting that "no child

is interesting till it is three years old," believing, of course, that the anæmic orphan would be off my hands ere then. Mark Twain (or was it Bret Harte?) defined a mining camp gentleman as one who "never shook his mother." Perhaps it was kindred hyper-delicacy that postponed my "shaking" The Review till it was nearly ton years old.

Undernourished as he was in 1900 and for years thereafter, The Review child, nevertheless, was distinctively good-looking. Though his stomach might be empty, he was always dressed, thanks to the Warren Company and the Ellis Company, in the very best of paper and the most becoming print. Indeed, this unenlightened and, of course, prejudiced old nurse of his adjudges him decidedly more attractive in his brown

By JAMES P. MUNROE, '82 Third Editor of The Review pinafore and octavo format of that period than in the presumably more business-like clothing of the

1900 - 1908, even thus

present day, donned for reasons no doubt sufficient.

To put away these childish metaphors, the Editor of

The Technology Review 66 My Fancies like the Flames aspire, dream of Fame and Fate; see my Future in the Fire, And oh! 'tis simply Grate

Another page from the January, 1899 issue. Puns were newer then: note the precaution the writer takes against misunderstanding

tardily, apologizes to his desperately few readers of nearly a quarter-century ago for certain outstanding things: first, the obvious padding of many issues with lists of graduates, M. I. T. Publications and such-like; secondly, the space-filling of which President Pritchett and he (we must have run almost neckand-neck) seem to have been equally guilty; and, thirdly, the funereal gloom cast over successive numbers by a long procession of obituaries. Looking at those many pages en masse, one gains the appalling impression that all the upbuilders, supporters and other friends of the Institute left this world in that special nine-year period. With three months intervening between issues, thismortuaryatmosphere presumably did not oppress—especially as the memory of all those notables needed to be perpetuated and the obituary notices were well done; but when such biographies are brought together in continuous perusal, the effect is as tragic as a visit to Père Lachaise.

On the other hand,

those early numbers leave the responsible Editor not wholly dissatisfied with the material presented, not all of which, by any means, did he and Dr. Pritchett provide. Moreover, far higher authority than his confirms this egotistic point of view. Said the Sunday Herald of February 14, 1904:

"No other college periodical that comes to our table has the freshness, readableness and fine flavor of earnestness of The Technology Review. . . . The value of its contents is high, and the tone throughout is lofty and generous . . . If anyone supposes that a school of science and technology is unlikely to develop good writers, this publication will correct his error. It yields precedence to no other of its class in the literary vitality of its pages, regarded as a whole.

Some of the articles, especially those which appear under the caption Editorial, have a happy felicity of expression, adorning, but not disguising, a substance

of robust, definite thought."

Furthermore, this bygone editor maintains that his rather systematic presentation of the outstanding activities of the Corporation, Faculty and Institute-ingeneral filled a want that the later, more haphazard, reporting has not met so well. Records of corporate action are seldom lively; but those who really open The Review are sober folk, not anxious for mere entertainment nor deceived into thinking they will get They want to know what is actually going on, both officially and unofficially, at the Institute. It is all so familiar to those on the spot that it is hard to realize the lack of information, and the desire to be informed, of the man at a distance who really cares. There are many such, and their tribe, under the ebullient tutelage of the new Executive Secretary of the Alumni Association, is certain to increase.

The Institute training is futile, however, if it does not impel one to ask why each new enterprise is undertaken. The Review's birth and the uphill labor of keeping it alive were logically inevitable; for the past students of the Institute had to be made "class conscious" if they were to take, with increasing years and far more rapidly increasing numbers, their proper share in the upbuilding of the Institute. To that end, three things had to be provided: a closely knit and thoroughly representative organization; a common and informal meeting-place; and a regular means of reaching every

Technology man through print.

The first need was supplied by the Association of Class Secretaries which, after many years of strenuous and devoted service, evolved itself, about 1908, into that equally effective body, the Alumni Council; the second need was fulfilled by the Technology Club, first at 71, then at 83, Newbury Street, which, in its active years, performed a service to the Institute out of all proportion to its modest membership; and the third need was supplied, however imperfectly, by The Review. As was said in an article on the Technology Club, celebrating, in 1901, its removal from one Newbury Street dwelling to another:

"The Club begot the Association of Class Secretaries, and the Association in time begot The Technology Review; and The Review here desires, as a dutiful grandchild, to present this modest tribute of honor and love to its grandparent, the Club, albeit the latter

is itself of such tender years."

As one of that alumni triumvirate, The Review rendered, as it is still so admirably doing, a service quite beyond that of making a convenient record of the Institute's growth. It is no exaggeration to say that, without this regular means of reaching all Technology men through print, the Association of Class Secretaries would have found it practically impossible to cement the Alumni as it so admirably did; and the Technology Club would have been nothing more than a pleasant meeting-place for a limited group of Institute men, instead of serving as the needed focus for work vital to the Institute.

Now that the Institute has accomplished so many conspicuous things, it is a temptation to maintain that the partnership of Class Secretaries' Association, Technology Club and Review deliberately started out to bring those things to pass. That The Review was, like all its tribe, mainly an opportunist, with its weather eye, nevertheless, on certain fundamental

goals, is indicated by the fact that, in its earlier years, when sentiment all tended that way, it strenuously opposed moving the Institute from its Back Bay location; whereas, after sentiment had been judiciously educated and brought face to face with stubborn facts which cried for removal, The Review shouted its loudest for a new site. Incidentally, its Editor, with other pedestrian alumni, tramped, during several years, hundreds of miles over apparently every possible piece of real estate within ten miles of Rogers, looking for that site.

The one never-forgotten objective of The Review was, however, to do its full share in welding past and present students into a militant organization eager to work whole-heartedly for the Institute's upbuilding along the lines laid down so clearly by its founder, Rogers, and its preserver, Walker. Essential to this development were, on the material side, absolute independence, and, on the intellectual side, that breadth of view and that roundness of training which are so inadequately expressed by the word "culture."

The campaign involved bringing the Alumni much more closely together, not only in rather dreary annual meetings, but in a real fellowship of clubs and other associations all over the United States. It implied making those scattered groups see, not only their power, but their responsibility in Institute affairs. It necessitated a campaign of education in the matter of term membership on the Corporation, so that the past students might gradually preponderate in the body of fifty which legally controls the Institute. It demanded, too, aggressive persistence in holding high, in the face of rapidly-mounting technical demands, the

cultural ideals of Rogers and of Walker.

Fortunately, - though the Merger seemed at the time a genuine disaster - the nebulous good-will of the Alumni was shocked into dynamic action, in the winter of 1903-1904, by persistent rumors of impending marriage with Harvard University. Such a cure for Technology's chronic poverty had been many times suggested and, in 1878, when the Institute was in almost desperate straits, had come within an ace of acceptance. It had been tentatively broached again in 1898, soon after President Walker's death; and the establishing of the Association of Class Secretaries and The Review had been not a little hastened thereby. Not, however, until that magazine was nearly five years old, did the wooing of Harvard become active, and therefore serious. Discussion of a "plan of alliance" gave the signal for immediate mobilization of all the theretofore scattered forces of the Institute. Of course, the past students were not unanimous; there were pro-Merger and there were anti-Merger cohorts, all of them making, in print and out of print, a loud noise which culminated in that biggest uproar of all, the Reunion of 1904, which almost cracked the Boston firmament.

Volumes VI and VII, when the Merger pot was boiling, were the banner years of this particular editorial service. Verbal ammunition was pouring in from all sides; the Corporation, which showed a substantial majority in favor of an alliance; the Faculty, which showed an overwhelming majority against; and the Alumni and undergraduates who, whatever their legal rights, or want of rights, insisted upon being heard — all these crowded into the narrow confines of The Review with every sort of argument. That these earlier differences must have been handled with discretion (whatever the private feelings of the editorial

board) is made evident by the fact that an extensive canvass of alumni opinion, with preliminary presentation of arguments pro and con, which was finally authorized by the Corporation, was formally placed in the hands of The Review. Of this, the magazine's

annual report says:

"A part of the year just closed [1905] was a very strenuous time for the Publication Committee of The Review, as that periodical was made, by the Executive Committee of the Alumni Association, the official means of bringing the question of the proposed alliance with Harvard before the whole alumni body. commission, among other things, involved the preparation and sending to all Institute men available of an extra number containing 231 pages, the proofs of which had to be submitted to a number of individuals and committees, and the printing of which had to be done within the space of about one week final cost of this extra number was \$2200.94, but the greater part of this large sum was guaranteed by the M. I. T. Alumni Association Executive Committee, who asked and obtained substantial aid from the Executive Committee of the Corporation.'

But how little conception can the younger generation gain from the above cool, almost Coolidgean, phrases, of the excitements of those belligerent days, of the daily and nightly conferences, of the far-flung excursions and bloodcurdling alarums which made not only that week of superhuman "wrastling" with the printer's devil, and with copy, and proofs, and paging, and a thousand other things, but also the weeks and months therebefore and thereafter, a journalistic

cyclone.

The Review took just pride in the acknowledged fact that in this furious melée it kept the controversial rudder true, gave equal space to friend and foe, and never tried, by suppression or innuendo or personal sneer, to turn the scale either way. So, while the Merger fight made many an honorable wound, it left no festering sores of personal bitterness. The champions on either side found their respect for their opponents strengthened by the mutual drubbing; and, after the smoke of battle had lifted, all of them discovered, what only a few up to that time appreciated, that the Institute of Technology is a most precious possession, well worth fighting for, well worth working for, and needing only adequate endowment, an ample location, and Alumni as devoted as the school's selfsacrificing Faculty, to become in actuality what Rogers and Walker had visioned it in splendid prophecy.

The Merger volumes represent the acme of service of the great triumvirate. As already noted, the Association of Class Secretaries, having devised, with infinite care and forethought the Alumni Council, retired to the background, contented there to remain except in the remote contingency of another threat against Technology's independence. The Technology Club, when most of the Institute removed itself to Cambridge, hibernated also, hopeless of finding any place, short of an island in the Charles River Basin, where it could bring its Faculty members and its downtown members around a common lunch table.

The Review, however, relieved of the "Merger" Editor, adopted by the comparatively rich Association of the Alumni, and animated, successively, by the versatile Ike, the erudite Tubby, and the present Mutt and Jeff twin-editors, has grown almost in proportion to the Institute itself and is now a business-like monthly

of truly metropolitan proportions.

Like the proverbial frog in the well, the Editor of 1900–1908, had to make a number of unsuccessful jumps before he could escape (horrid mixing of metaphors) from his adopted child. The first recorded attempt — though it was probably at least the tenth — is found in the editorial board's report for 1907, which says:

"In its report last year, your Board expressed the fear that, unless more revenue was secured, it could not make so favorable a showing this year, as in November, 1905, when there was practically no deficit. We are happy to state, however, that the close of the present volume (8) finds us with only the small deficit

of \$43.10

"In this connection, the present writer begs to remind the Association that this completes the eighth year of The Review, and that with the close, preferably of the ninth, and certainly of the tenth volume, he must ask to be relieved of his duties upon The Review. He ventures to suggest, therefore, that the Association take seasonable steps to secure some one else who can give gratuitous service in the immediate supervision of each number or else so far to increase the revenues of the magazine that it can afford to employ a paid editor."

Having had repeated sad experience, the Editor doubtless deemed it wise to retire while the drain upon his own pocket would not exceed \$43.10. Evidently, nobody paid any more attention to this than is usually given to other annual reports; so, a year later, the patient chairman of the Board of Publication, having noted, tonelessly, that "the cost of Vol. IX has been kept within the current income" (doubtless he did have

to absorb that \$43.10), continues:

"Although the very great efficiency of the clerk has so systematized the work of The Review that the duties of the managing editor have been reduced to those mainly of supervision, he yet feels that he cannot, in justice to the other demands upon his time, much longer carry the responsibility involved. He begs, therefore, to present his formal resignation, to take effect at such time during the coming year, as it may be found possible to make other arrangements for The Review."

This time some sympathetic soul must have been listening; for in the report of the Association of Class Secretaries for April 30, 1908, are found the following:

"The Committee appointed at the previous meeting to select a managing editor for The Technology Review to succeed Mr. Munroe, whose resignation had been most reluctantly accepted, reported that a decision had been reached, and the committee requested authority to engage an editor.

"Dr. Noyes, '86, Acting President of the Institute, stated that the Corporation had felt the need of more systematic and better directed effort in the matter of bringing the Institute and its work before the public and that he had been authorized to engage for the work the man selected by the Class Secretaries' Committee for the managing editorship of The Technology Review.

"Announcement was then made that the man selected for the two positions . . . was I. W. Litchfield, '85."

So the third Editor of The Review laid down the burden which he had carried far too long, a burden that he could not have borne at all had it not been for the splendid support of the Association and the unflagging aid of his colleagues on the Committee on Publication: Allen, '72, Snow, '82, Little, '85, Noyes, '86, Metcalf,

'92, and Humphreys, '97. Even that help would have been unavailing had the Editor not possessed in Miss S. J. Twitchell a rarely competent and persistent Executive Secretary. All the details of successive issues, most of the labor of holding old and seeking new advertisements, together with the incredibly fussy work of keeping full the list of subscribers, were entrusted to her capable hands. If the Institute owes any debt—as I am convinced it does—to The Review of 1900–1908, by far the largest creditor is

not the Committee, and is not the Editor; but is that efficient secretary who, because of her devoted service year after year, deserves adoption into the upper ranks of the Alumni.

In Volume XI of The Review, Ike, evidently seeking to exalt himself by mercilessly exposing his predecessor, permitted that person to perpetrate a long article entitled "Ten Years of The Review, from which the author now proceeds to extract the least dull things. Having pointed out that half the thenexisting [January, 1909] body of the Alumni had been graduated since 1898, and that, when The Review was started, the alumni body was but a loose aggregation, (this sounds actionable!) the writer continued: [it is] "now a vitally knit family of men, loving and believing in Technology and what it stands for, a family that has established centres of Technology life in twenty-five sections of the country as well as in Boston itself, that is maintaining a busy alumni office for the conducting of large Institute enterprises, that has taken on itself the super-

vision of and a large responsibility for the athletic and social side of undergraduate experience, that has subscribed \$100,000 for a Walker Memorial which shall be the controlling centre of this student life, that has given an unfettered quarter of a million towards the immediate support of the school, and that, through the nomination of fifteen of its members to the Corporation, has shown its willingness and its capacity to assume a major share in carrying the heavy burdens of administration. To signalize this new spirit, the body of past students held, in 1904, a Reunion which, . . . astonished Boston and amazed itself."

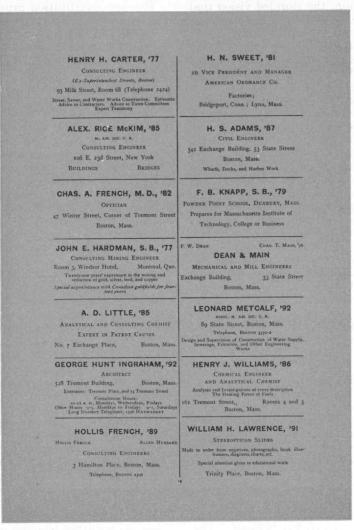
Noting the vastly improved spirit in the undergraduate body, the appointment of a Dean, and the widening of educational opportunities at the Institute, the article submits a vaticination of much interest: "Largely out of that trial by fire [the proposed Merger with Harvard University] has come the splendid spirit of coöperation which is to be the watchword of the great coming Reunion of 1909, and which will make the history to be recorded in the next ten years of The Review significant and fruitful beyond that of any previous decade."

Prophecies are usually knocked into pi by subsequent facts; but that made in 1908 seems almost comi-

cally modest in view of the actual developments of the succeeding fifteen years. Who could have dreamed of "Mr. Smith" and of those other great benefactors, including the Alumni themselves; of the transcendent service of Technology and Technology men in the World War; of the noble group on the thither bank of the Charles; of the completed Walker Memorial; of the dormitories, existent and nascent; of the vast and varied new activities of Faculty, undergraduates and Alumni; of endowments and income and fame almost inconceivable in 1908?

No individual (except "Mr. Smith") or single organization should be given special credit for all this. It has been a vast coöperative activity such as the educational world but seldom sees. Yet upon certain compelling forces it is possible to place a distinguishing finger; and even one so closely involved as is the third Editor is justified in declaring that among those truly creative forces has stood high The Technology Review. Moreover, he possesses solid evidence that a

worth-while job was done; for, on January 11, 1910, the Association of Class Secretaries gave an elaborate dinner in his honor; poured into his ears golden and silvern speeches of which he was most unworthy; and showered him with a superb silver service which is his most treasured possession, and with gold for books to an extent that he never before had seen. This is the first opportunity given him to make public record of his deep and never-dying sense of obligation to every one con-Whether or not his other assertions can be cerned. proved, he is ready to maintain before all comers the thesis that, through the deepening of experience which more than eight years of work with the magazine afforded, this fortunate Editor took out of The Review incalculably more than he was able to put in.



A page of "Professional Cards" from the first number of The Review

3: From Nineteen Nine to Nineteen Seventeen

The Review's Outline reaches the Middle Ages. which were, however, far from Dark

The Institute had passed through a long period of controversial strife

By I. W. LITCHFIELD, '85 Fourth Editor of The Review

and reconstruction, and emerged tried as by fire. Through the breaking clouds we saw

with wondering eyes, steady on her course as though she had never known a storm, the glorified vision that William Barton Rogers had seen almost half a century

The discussion attending the Merger proposal had resulted in revealing the real greatness of the Institute as nothing else could. Although most successfully disguised, it proved to be a blessing after all, for it stirred every loyal alumnus to a sense of his responsibility to Alma Mater and aroused desire to make up

for lost time and lost opportunity.

But this happy metamorphosis was not entirely spontaneous. An able mind was directing the course of The Review through that period of stress, and a group of men of which the Editor was a member, was preparing for the advent of a happier day. editorial difficulties of conducting the magazine during that period can hardly be imagined. The task was skilfully accomplished, and the strong influence of The Review in hastening the reconstruction period was recognized by all. The conduct of the magazine was a labor of love on the part of Mr. Munroe, and with its transference from the Association of Class Secretaries to the Alumni Association, he asked to be relieved.

At a dinner given in honor of Mr. Munroe, as an expression of admiration, as well as gratitude, for his ten years of fruitful labor, Arthur D. Little, '85, said of his connection with The Review: "Munroe was The Technology Review. To his intimate knowledge of the traditions of the Institute, his glowing enthusiasm for the hopes and aims of its great founder, his close familiarity with conditions and needs as then existing and his clear vision of the trend and course of the Institute development, was due the early recognition of those ideals toward which The Review has consistently and continuously aimed."

It was with much perturbation that the present writer took over the work in 1909 and attempted to follow in the footsteps of such an able predecessor. To be sure, the problem was much less difficult. The sea was smooth, the skies were clear, and in a sense we were in the trade winds. Our new President, Dr. Maclaurin, had just come to us. His first appearance at the Annual Banquet in Symphony Hall and his Inauguration in June were inspiring enough to remove the last trace of factional difference, if any existed. We were preparing for a great alumni reunion that June and there was a general feeling of optimistic expectancy.

The history of The Review is the history of the Institute, for The Review is its historian. The magazine reflected all the phases of Alma Mater in its attempt to show the more distant Alumni her growing strength and greatness, and to instil into them something of the essence of her wonderful spirit, which trials had only glorified. In doing this, it hoped to mobilize alumni resources as an effective aid to a career of greater influence and usefulness for our insti-

tution.

The most important element in the great expansion that followed was the reorganization of the Alumni

Association, and the creation of an Alumni Council with broad powers to act quickly and effectively. The new constitution provided for admission of nongraduates as associate members, by vote of the Council. These were later given the status of graduates with the right to vote and hold office. The Register of Graduates was changed to the Register of Former Students and first published in 1909. To complete the working machinery an alumni secretarial office, adequately equipped and manned, had been established through the efforts of the Income Fund Committee. The immediate result was an exercise of its new powers by the Council, a very large increase in the membership of the Alumni Association with greater circulation and influence for The Review, and a business office which has been the right arm of the association ever I cannot refrain here from pointing out our great obligation to Walter B. Snow, '82, to whom we are principally indebted for the formation of the Association of Class Secretaries, and to Frederick H. Fay, '93, its untiring and able Secretary. we ever forget the difficult and far-sighted work of A. F. Bemis, '93, Howard L. Coburn, '87, and Mr. Snow in framing a constitution that has proved to be exactly what we needed, and has been a model for at least three other colleges.

By a happy circumstance the second five-year Reunion came during 1909 and here we were with the stage all set, properties in order, and flood lights ready to turn on. And it was a great Reunion; the most wonderful outpouring of Alumni that Technology had ever seen. Fortune smiled on us in giving us Edwin S. Webster, '88, as President of the Association, and no detail was lacking to make it a perfect success. In preparing for the Reunion, it became necessary to strengthen and increase the number of the local associations and to work up the classes to a high pitch of enthusiasm. The inauguration of President Maclaurin, which occurred on the first day of the Reunion, was a most impressive ceremony. Class stunts at Nantasket were introduced for the first time, and there was an inspiring banquet at Symphony Hall.

In all these matters, The Review was the broadcasting element. True, mimeographed and typewritten communications with local associations and committees were voluminous, but it was through The Review that we reached the individuals. With the volume of work that opened up, the editor had to minister to the publication at odd times and with his left hand, but the printer didn't let any bad spelling get by, and the

general idea got over somehow.

The first meeting of the New Alumni Council, which was held at the old Technology Club on Newbury Street, May 12, 1909, was a momentous occasion. The matter of a new site was first publicly broached by Dr. Noves, who stated that it was thought desirable that the Institute, now much overcrowded, should move to some location not more than two miles away. Before any steps were taken, however, a large portion of the necessary funds should be in sight. That was the present problem. Dr. Noyes also suggested that committees be appointed to consider a permanent Summer Camp of Civil Engineering, and also instruction in refrigerating and gas engineering. It was also suggested at this meeting that a committee on student welfare be appointed to report on undergraduate interests at meetings of the Council. Henry Howard, '89, suggested that the Institute give some particular attention to aeronautics. Here were four suggestions of fundamental importance which could not have been advanced as effectively in any other way. Neither the Cor-

poration nor the Faculty could have any thought that the Council was usurping its powers, as representatives of both bodies always have been members of the Council. Indeed, two of the suggestions were presented by an ex-President of the Institute. This is what

happened:

In the Summer School of Civil Engineering: Messrs. Metcalf, '92, Fay, '93, and Bemis, '93, were appointed on the Committee. With Professor A. G. Robbins, '86. various sites were examined, a location was selected and plans made. The Committee presented these to the Corporation, stating that through the generosity of an unknown donor and Charles W. Eaton, '85, the whole matter had been financed. Corporation gave its approval and within three vears from that Council Meeting the Institute had a most commodious camp-a model of its kind—on a beautiful and suitable location at East Machias, Maine, with a hundred acres of land.

By the Committee on Aeronautics: Messrs. Howard, '89, Henry Morss, '93, and Butler

Morss, '93, and Butler Ames, '96. Investigations were carried on in this country and abroad and recommendations were made to the Corporation. In 1913, Lieut. Jerome C. Hunsaker, '12, now Assistant Naval Attaché at London, a graduate in the Course of Naval Architecture, came to the Institute, after extensive investigations abroad, to take charge of the Course in Aeronautics, the first to be established in the country.

In Refrigerating and Gas Engineering: This matter was taken up by the Mechanical Engineering Department and courses were announced in 1911.

On Student Welfare: A committee was appointed to act with the Institute Committee of students in a purely advisory capacity. This arrangement worked so well that now practically all the major student activi-

ties have alumni, advisory councils appointed by the Alumni Council. So much for the Council, its resources and methods.

The subject of a new site for the Institute was being discussed privately and publicly, but the question of funds was a facer. To make matters worse the contribution of \$25,000 a year from the State came to an end in 1911, the year that also marked the fifth and last payment on the Income Fund, which had been raised to care for the annually increasing deficits.

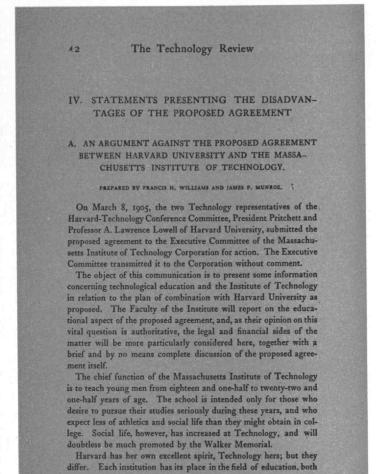
The very first thing to be done was to see that the coal pile and janitor's bills were provided for. But how? The object was altogether too unsentimental to stimulate further enthusiasm from the Alumni, and to ask the donors to the Income Fund to extend the term another year was only putting off the evil day.

A perfectly good reason why the Commonwealth should appropriate \$100,000 a year for ten years was developed and in 1911 a Committee was appointed to see that we got it. James W. Rollins, '78, was the Chief Engineer, Eugene Hultman, '96, the Political Engineer. Harry W. Tyler, '84, was Sleepless Secretary. There were others, but these were in the middle of the picture. Of course, we got it. Of this Campaign, Practical Politics said: "Talk about amateurs in the lobby, the Tech people have put the finest machine into the Legislature that has been seen this year."

That was the beginning. Then came Coleman du Pont, '84, with his gift of \$500,000 for a site—and the decks

were cleared for action. Without these two pivotal factors, we were out of soundings, but with them, although we didn't know it then, we were on a sure and safe course. The Review in the meantime realizing that the quarterly numbers were inadequate to the pace, issued smaller newsy numbers monthly, between the quarterly periods.

The site quest was fully described in The Review. Locations were considered in Jamaica Plain, The Fenway, Allston and Cambridge. The Springfield Alumni offered a beautiful site in their city with a guarantee of two or three millions, but removal from the vicinity of Boston could not be considered, although the offer had a most beneficial influence. It had been decided to call on the Alumni for money for



In the days of the Merger. A page from The Review during the editorship of Mr. Munroe

new buildings just before "Mr. Smith" made his donation of two and a half million dollars. The Alumni Fund was rather disappointing in consequence. Only \$500,000 was raised where we had expected over a million, but it was a vast improvement over the Income Fund and paved the way for that greater effort of recent years, the Educational Endowment Fund.

From the time that the site was selected, The Review kept its readers posted on the monthly developments, showing graphically by photographs and diagrams,

first the tentative sketches and then the accepted plans. Each month the progress of construction was pictured to the distant Alumni with as many of the stimulating things about Technology as could be crowded into The Review pages. The Review was to an extent a medium of conservative propaganda: that is to say, some time before a movement was started. The prepared Review readers for it, giving them all the facts in the case.

One of the remarkable accomplishments of the Alumni Council was the grafting on to the curriculum of the new course in Engineering Administration by Jasper Whiting and his committee. This was suggested by him at a Council Meeting, a committee was appointed, a study chart and even a tabular view were prepared, the Corporation and Faculty were convinced, and the course instituted in an incredibly short space of time. In such matters as this which were within the jurisdiction of the Council, the Review merely acted as a news dispenser. It was in the

field of local alumni organization and class solidarity that its upbuilding influence was most felt.

It was valuable in the formation of the Technology Clubs Associated in New York in 1913, and was in increasing interest in subsequent meetings of the clubs elsewhere. Realizing the potential importance of the New York Club it has done all it could to help build up that interest, and, in the developments that are bound to come there within a year or two, The Review will be found to be of valuable assistance.

The great mission of The Review, however, was, and is, to the classes. The class is the vital unit; strengthen the classes and the whole structure is strengthened. Class news is the central point of interest to every alumnus. During our régime many of the men didn't

read anything else. It was our aim to get the secretaries to contribute as much live class news as possible, and encourage them to send photographs for reproduction. And most nobly did the secretaries respond. In 1909 The Review contained 192 pages of class news, leaded; in 1916 there were 464 pages of solid type.

Similar attention was given to the building up of the local associations until the accounts of the local meetings became a distinct feature. In 1916 there were probably less than twenty clubs — in 1919 there

were between fifty and

fifty-five.

It wasn't possible, however, to give the necessary time in the field to local associations, classes, undergraduate activities, miscellaneous meetings and boosting visits, and at the same time do justice to The Review. Nevertheless, it is true that The Review comprised a fairly complete record of the Institute and its various connected interests. The only speeches reported or articles quoted were those of President Maclaurin, and such others as bore directly on some phase of the Institute with a view to constructive value. The aim was to sustain a news balance and allot the space with an idea of perspective -and everything to the honor and glory of the Massachusetts Institute of Technology!

There is one number, however, that we are proud of, one issue that was done really well and that we would like to take credit for. It was the report of the great Dedication Reunion of 1916, which portrayed every feature of that many-sided entertainment in such a way that

one could almost see it, though he was not there. It is to the kind assistance and graphic pen of Robert E. Rogers that the writer and the readers of The Review are indebted for this brilliant report of so much importance in Technology history.

It was doubtless because of this connection with The Review that he was chosen to conduct it as the Fifth Editor when the war came upon us. During that trying time the work was carried on with remarkable ability, under handicaps that would have staggered most of us.

We had reason to congratulate ourselves on that selection. It is doubtful that there could ever be found again a man, not a graduate of Technology, who would so absorb himself in the affairs of the Institute.

FORMAL FAREWELL TO ROGERS

Memorable address of Mr. James P. Munroe, '82, in Huntington Hall on taking leave of Old Rogers

No one who heard James P. Munroe's tender and inspiring oration of farewell to Rogers on Monday morning will ever forget it. Although it was given at almost the busiest time of all the busy days, when newly arrived alumni were storming and besieging the all-too-narrow headquarters at the Copley-Plaza, yet eleven o'clock that morning found Huntington Hall well filled with alumni and undergraduates to hear the man who is perhaps the best fitted among all the alumni tell from that platform on which Rogers was stricken, the story of what the building which bears his name has meant in the past and must mean in the future.

Without the picturesque aids of the great farewell of that evening-to-come, without the emotional accessories of lights and music of marching and cheering, of the flag and the bugle—yet that hour of tender, regretful reminiscence, of earnest warning and high aspiration, did not yield in impressiveness to the larger farewell, but gave a lasting clothing of thought and speech to the emotion which that other expressed.

It was not a history; it was not a review of science; it was, as Mr. Munroe himself said, a tribute of love. And as such it remains one of the most perfect and perhaps the most memorable of all the speeches of the Reuniom

Mr. Munroe's Address

. However indifferent he may elsewhere be, even the so-called "practical" man cannot remain unmoved in Westminster Abbey. Its solemn architecture sheltering so much of British and American history, its chapels steeped in the weighty deeds of prelates and of kings, its monuments, ugly indeed, but bearing world-compelling names,—all combine to stimulate the coldest mind.

Should that visitor, moreover, come in at a moment when the music of a service is filling the glowing spaces of the Abbey, the effect, even to the calloused, is little short of overwhelming. To restore his emotional balance, however, he has but to enter the cloisters and to find there the little stone, so homely in its appeal, the famous tablet to: "Jane Lister, dear childe." Who Jane Lister

From Mr. Litchfield's volume. The Review at the time of the Dedication Reunion in 1916

4: From Nineteen Seventeen to Nineteen Twenty-Two

The Review's Outline culminates in the modern period and the Great War

In the June 1917 issue of the Technology Review, a thin pamphlet of a score of pages, I made my bow to

the Alumni under the caption, The Amateur Editor. I said, if I remember rightly, "The idea is not, Don't

shoot the pianist, he's doing his best, but, Don't shoot Ike Litchfield, it isn't his fault!" This began what one of the present editors once called in a moment of malice, The Victorian Age of The Technology Review. He didn't mean well—at all—but I'm glad to let it stand. Implications differ.

I got myself into it by having been imprudent enough, the July before, to write almost the entire record of the Dedication Reunion. And when the war came it was held against me. Early in the spring of 1917, Litchfield became involved in the task of indexing the Alumni for industrial service. As the job grew, its possibilities grew also. So presently Litchfield took his index and departed for Washington for the duration of the war, leaving the May, June and July issues to be taken care of. Apparently everybody else was occupied. Every likely person was in war service of one kind or another. Munroe was commuting to Washington, Pearson was making a ten-thousand mile swing round the circle to tell the Alumni what

Technology was doing, Lobdell was at Plattsburg, and Hodgins was — presumably — taking his College Entrance Examinations. There was no one else. I was elected

So I began, in the middle of July, to put together the May and the June issues, taking infinite pains to keep chronology straight, writing with infinite zest of the April meeting of the Tech Clubs Associated in Cleveland, which I had not attended, and of the May Council Meeting and the Out-of-Door Commencement, which I had not attended either. And presently, somewhere in September, appeared the July issue, some 200 pages full of every bit of material I could scrape together . . . and it was a good deal. For two years there was no lack of material, war material, to print.

By ROBERT E. ROGERS
Fifth Editor of The Review

And the habit of publishing at least a month late was one I never got over. First impressions last.

That was the last year of the monthly numbers. We ended that experiment in December with the first

The Technology Review

Published at Cashridge "A" Branch, Boston, Mass.

Rossey E. Bosons. Ellier, Manuchaustits Incinude of Problembey, Combridge, Mass.

Vol. XXII JANUARY, 1920 No. 1

RICHARD COCKBURN MACLAURIN

1870—1920

Gessar Augustus found Rome brick and left it marble.

Richard Cockburn Maclaurin, ten years ago, found a great institution barred from potential supremnacy in its field by poverty. Trained as acholar and investigator rather than administrator, he addressed himself to the problem of administration and of endowment under heart-breaking difficulties.

In ten years he moved the Institute to Cambridge, found the land and the money to buy the land, found a munificent donor, found subsidy from the State, made a statesmanlike arrangement with Harvard University, put the Institute at the service of the government in time of war and administered that service notably, then labored for a permanent endowment which should leave him free to carry out his long-cherished plans for more perfect organization for usefulness.

Worn out with that struggle for money he died, as died Rogers and Walker before him, sacrifices. He saw his great endowment secure, his student body doubled, his faculty growing, and the inception of a plan whith should give the school permanent and increasing funds and unexampled opportunities for usefulness.

At the moment of that triumph, on the threshold of that greater constructive service to which he had looked forward so eagerly for ten years, he died. His death was tragic, but in proportion as it was tragic, noble. To him, more than to any other single man, the world owes the new Institute which is the old Institute for the first time capable of its opportunities. The foundation stones of this new school are cemented with his life-blood. That fact, according to ancient tradition, should make its walls eternal. Let it be so!

Duice et decorum est it is sweet and noble that a man snould die for his work.

The Review in mourning. A page at the time of Dr. Maclaurin's death

list of Tech men in war service, a list of some 1600 names, which took up the entire issue. Thereafter, only the four quarterly issues a year, usually of about 200 pages, published at first by the Rumford Press in Concord, New Hamp-shire, but shortly thereafter . . . I don't remember exactly when but I suspect it was in November, 1918, when pressure on space drove us to a small crabbed type, that spoiled the fair appearance of the magazine . . . Shortly thereafter the Murray Printing Company took us over.

For Litchfield the magazine had been a useful means of working up enthusiasm for the things the Alumni were doing, the chief instrument in getting the Alumni behind such vast projects as the Dedication Reunion. I had no such responsibilities nor opportunities. My job, as I saw it and as I still see it, was to cram into The Review, quarter by quarter, every shred of information I could lay my hands on which concerned Technology and would interest Technology men. The result

was, I am inclined to grant, a scrapbook, but an extraordinarily rich scrapbook. I really believe that in my five years as Editor, nearly everything important that concerned the Institute and its collective and individual Alumni and its day-by-day life got into the

pages of The Review.

In the beginning, the indefatigable John Ritchie, Jr., then publicity man for the Institute, supplied me, from his journeyings up and down and to and fro in the Institute, with a wealth of material which I could not have secured in any other way. Later, when I had to rely on my own poor publicity pickings, I levied without shame or discrimination on every piece of printed matter I could find, the press clipping bureau, with its vain repetitions, the T. E. N., when it later

established itself and began printing its excellent biographical articles, and . . . most of all . . . The Tech. It got to be a joke, I suppose, the point of which The Tech never quite saw, that I lifted what I wanted, acknowledged it if it seemed important or well written, and pirated it simply when it didn't. Most of that material, I could not have secured in any other way; much of it, the Alumni would not in any other way have ever seen. Like Kipling's cockney Homer

What 'e thought 'e might require He went and took, the same as me.

The Voodoo and the T. E. N. John Ritchie and The Tech Board, too, They 'eard old songs turn up again Only they didn't keep it quiet, same as you.

They knew 'e stole, 'e knew they knowed, They didn't tell or make a fuss But winked at 'Omer down the road And 'e pretended not to notice . . . until now.

Of course there were a lot of inaccuracies. I was a fairly busy English instructor, I didn't have any assistants, and so I didn't pretend to verify what I printed . . . bless you, sometimes I didn't even read proof . . . because I knew that somebody would be sure to point out my errors and give me a chance of correcting them in the next issue. And sometimes I did correct them. The worst blows though were the not infrequent occasions when I would be held up for errors in articles I had reprinted directly from The Tech trusting in its well-known high standard of accuracy. Usually, The Tech would blandly refuse to consider the matter and I would have to do the apologizing. And then there was that unfortunate matter of the rosy write-up I gave The Technology Plan, so rosy and so hopeful and so full-from-the-heart-out that the then Director of the Technology Plan was forced to issue an official disclaimer saying that folks weren't to believe what The Review said about it; it was too good to be true. Well, looking back over the years, I suppose he was right!

But on the whole, I have always believed that the future historian of Technology, if he is gifted with patience, and a capacity for research and verification, and an eye for poetic license and undergraduate inaccuracy and bad proof-reading, will find in those volumes of The Technology Review, from May 1917 to July 1922, a rich mine of all sorts of imaginable and unimaginable facts and theories and anecdotes and personal stories and compilations and bird's-eye views, which will give him a picture of the Technology microcosm in those years that is not to be matched anywhere. They are almost unreadable, it is true, but they are rich and copious and jammed with puman interest. They might almost do, at a pinch, in the absence of other records, at the Last Judgment.

The big years were, of course, the volumes that covered the college years 1917–18 and 1920–21. The first volume contained in a loose, sketchy repetitive sort of way most of the material that was to be later so beautifully organized and written in the Technology War Record: the honor rolls and lists of citations, the portraits and life sketches of our young dead, the stories of the Washington bureau and Munroe's work for rehabilitation, of the Women's Auxiliary and the Ambulance Corps, the Tech Bureau in Paris and the American University Union, the war-time

activities here at the Institute, the Naval Aviation and the rest, Camp Cunningham, at Machias and the S. A. T. C., and the human interest stories of Tech men scattered half across Europe and Siberia. And it was pretty lavishly illustrated in the old expensive way. I guess it was expensive, but I never knew. From the first month of my incumbency to the last I never knew what it cost to issue the magazine nor how much the deficit was. The officials of the Alumni Association gave me a free hand, paid the bills, never complained and never interfered. It was the pleasantest, least vexatious job an Editor ever had, and they were the pleasantest, most forbearing men an Editor ever worked for.

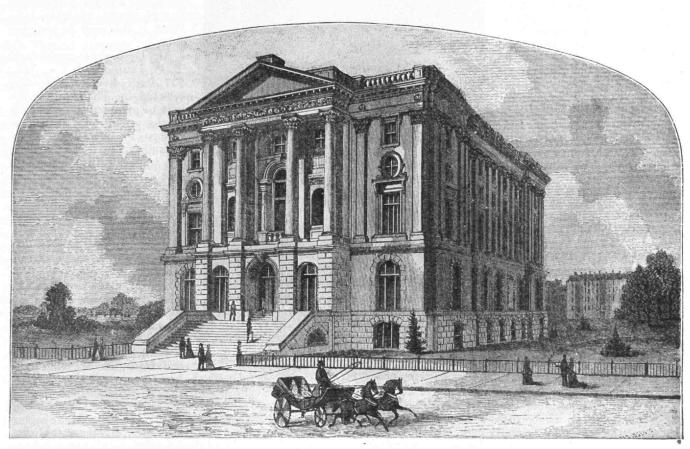
But perhaps the year 1919-20 was the big year. We abruptly stopped the war news . . . what little there was left of it — and concentrated on the Endowment Fund campaign. In that The Review only recorded, the whole thing was carried through, one might almost say, between issues. The splendid success of the Drive, the disclosure of the identity of Mr. Smith, the death of Dr. Maclaurin, with all it meant to Technology, and, finally, the June Reunion and commemoration meeting of that year filled The Review with perhaps the most important and solid material in all the five volumes. And a year later, the election, inauguration and resignation of Dr. Nichols, the retirement of Dean Burton, and a certain flurry hovering round the publication of an editorial concerning Marshal Foch . . . these I remember as the high lights of that volume. During these years we lost by death Crafts, Cross, Bates and Sedgwick, as well as Maclaurin, and a far larger number of men, not less valuable, by promotion, resignation and retirement. An editorial concerning that last, deploring the fact, published in the last issue I edited, seemed to bother some people as much as did the Foch editorial. One man even wrote a waspish letter full of bad French puns about it. But he waited until I had resigned, and he had resigned, and it was never printed . . . so it didn't matter much, anyhow.

The conditions under which The Review changed hands and policy are so recent as to be familiar to everybody. I had long urged that a quarterly could no longer take care of the news of Technology and its alumni. The issues were full to bursting already. What was needed was a monthly, a couple of full time men at work upon it, a business manager and an advertising manager and a policy, and some real, honest, genuine, born Tech men as editors, instead of a lone, lorn Tech man by adoption, with another job anyway. What was needed more was a man to show it could be done successfully. He came - had been there all the timeshowed as a practical possibility what all the rest of us had only looked wistfully at as a hope, and took charge. He found another man to help him. Hence the pyramids!

The new Review is a fine, live, business-like, accurate, well written and edited, interesting paper, but I shall never like it as well as my own. And Litchfield, I suppose, never liked mine as well as his own. And from the distant years of 1899 I imagine that Hopkins and Little and Munroe shake their heads over everything since. And so it's mighty hard on Lobdell and Hodgins, when they corral us all for a group picture, to have us all looking as if we were thinking, "Ah, youth, youth... now in my day!" All of us but Humphreys, and Hopkins, because they know, I fancy, that youth isn't piling up any deficits.

But, as I say, I like my own volumes best. Partly because they were great years for the Institute. The war, with its thousand interwoven strands of interest, the Endowment Fund campaign, the long, critical period of interregnum, the violent increase in registration, the development of student activities . . these would make any college magazine interesting and important. Even more than these is the indisputable Fact, dating from the 1916 Reunion, of the rapidly growing self-consciousness of Technology as a great university of science and humanism, replacing imperceptibly, but clearly, the old narrow concept of a school of applied science living unto itself and satisfied with itself. In the boys of the past six years that change in feeling is unmistakable. The tone of the student body is quite noticeably not the same in these matters as it was when I . . . and Lobdell . . . came to the Institute in the autumn of 1913. That light remark about mine being the Victorian Age of The Review is not so smart, after all. There may be something in it. A good deal happened in that age, and most of it . . . I flatter myself . . . was recorded. A great Victorian once uttered his Apologia pro Vila Sua. This is mine. The pious Aeneas, in recounting the tale of Troy to Dido, congratulated himself "All this I saw and part of this I was!"

Man without records is barbarous. Man with records is civilized. That is all the difference there is. It is not a matter of tools and weapons and comforts and luxuries; it is a matter of alphabet, stylus and tablet. In this light, the editing of even so small a thing as an alumni magazine for an institute of learning is not so small a thing. The life of a great university, ever changing, ever the same, is one of the most permanent and important things in our drifting civilization. Anything that can give it a kind of permanence, that can embalm and treasure up to a life beyond life the color and movement and significance of its days and terms and years is precious, it is Literature. And that is why, I suppose, I filled The Review for five years with everything I could lay my hands on that I thought would interest even one alumnus or one undergraduate and so preserve something which might some day find its little destined spot in the great mosaic which is the history of Technology. The policy was, I am firmly convinced, more firmly convinced than ever, essentially right, even if the execution was careless and, in the words of Oscar Wilde, exquisitely accidental. Or as the Chinese convert to Evangelism said so appropriately: the ghost was willing but the meat was weak. But-wait till Lobdell and Hodgins write their Apologia!



THE ROGERS BUILDING From an old Wood Cut

THE PUBLIC E

Today

THOMAS C. DESMOND. '09

The individualism of the French mind, the peasant's desire to have his own home in the devastated region rebuilt according to his own peculiar ideas and his inability to see the advantages of American large-scale construction of uniform houses, proved too much for T. C. Desmond, New York engineer and contractor. He is just back from a three-month study of the war-

torn provinces, undertaken at the request of some French engineers anxious for American coöperation in rebuilding

the ruined homes.

"Such reconstruction work as is being done is being carried on in a very haphazard and expensive way," he said yesterday. "I believe that any capable American engineering firm using modern American construction methods could cut the cost at least in half if given large scale supervision over whole districts.

'The trouble lies in making the French see the advantages of this procedure. France is a nation of individual peasant farmers. This means that every Frenchman who had a house destroyed insists on having it rebuilt exactly in accordance with his own individual wishes by a particular individual architect and by his own small contractor entirely apart from any other work.

Mr. Desmond almost bristles in his inability to sympathize with this frame of mind. He admits that it makes for artistic values to have all the houses rebuilt differently, but this seems to him no time for the French to be fussy.

"It is frightfully expensive," he said, "and it strikes me that a nation whose finances are in

as desperate shape as are those of France ought to be counting the cost very carefully in this reconstruction Moderate size, uniform houses, economically built from standard designs, which make it possible for the American wage earner to own his own comfortable home, are absolutely unknown in French villages. The first problem is to educate the French to see the reconstruction problem from the American point of view.

"I recall one house which was rebuilt at such a cost

that the owner lost his whole farm on a foreclosed mortgage to pay for it. An American tourist, to whom I remarked that it was at least twice too expensive, replied that 'no house could be too good for these won-derful French people.' The trouble with that beautiful sentiment is that it results in only one house being built today where 100 have been destroyed. The rest of the people are still living in huts or temporary barracks.

"We went to France full of sympathy and were enormously surprised to find that the average Frenchman does not feel poor now or in need of any sympathy at all. His attitude is that France won the war, that it is only a question of time before the army will force

Germany to pay handsomely, and that French finances will be all right after that. Perhaps that is why they regard the depreciation of the franc and the increasing national deficits with comparative complacency and are content to keep to their individualistic way in politics as well as reconstuction though foreign observers may think it the road to national

Mr. Desmond is president of T. C. Desmond & Co., Inc., 247 Park Avenue. He was selected by Theodore Roosevelt to organize the engineers in the volunteer division the former President offered to organize in 1917 and was later president of the Newburgh shipyards, where seventeen 9,000 ton boats were built during the war.

-New York Tribune.



EDWIN S. WEBSTER, '88

EDWIN S. WEBSTER, '88

Edwin S. Webster, President of the firm of Stone & Webster, Boston, has been appointed honorary Boston consul for the Japanese government.

Japan's regular consular business in Boston will be conducted as usual by the Japanese consul at New York, but Mr. Webster will be a nominal representative of Japan in this city.

Mr. Webster has a wide acquaintance among Japanese officials and is well known in Japan, where he has traveled extensively. He was prominent among the financiers who raised and forwarded the relief fund for the Japanese cities which were stricken in the recent earthquake.

—Boston Post

-Boston Post

FRANK E. SHEPARD, '87

Frank E. Shepard, who recently was appointed superintendent of the United States Mint in Denver, Colo., was formerly a resident of the Dorchester section of Boston, and was graduated from the Dorchester High School in 1883, and from the Massachusetts Institute of Technology in 1887. After a short time in the office of the United States

boiler and marine inspectors, in Boston, Mr. Shepard went to Colorado, and in the early nineties established himself in the mechanical engineering business in Denver, where he has resided ever since. Although prominent in the business activities of that city, Mr. Shepard never entered politics, therefore his appointment to a position of such trust and responsibility at the United States Mint was not only a surprise to himself, but gratifying to his friends. -Boston Evening Transcript.

STUART J. SCHOFIELD, '12

Dr. S. J. Schofield of the University of British Columbia has just been selected to undertake a thorough investigation of the geology of Hongkong, China. Dr. Schofield, who is a graduate of Queen's University, Kingston, and of the Massachusetts Institute of Technology, Boston, has been engaged for many years in geological research in British Columbia, United States, and Mexico, and was elected last year a Fellow of the Royal Society of Canada in recognition of his scientific attainments. He is also consulting geologist for the Howe Sound Company of New York. This work is being undertaken by the geological department of the University of British Columbia, and although it is not directly connected with the Pan-Pacific Scientific Union, nevertheless the results of the investigation will advance the aim of this Union, which is the solution of all the scientific problems affecting the Pacific and those countries bordering upon it. The recent disastrous earthquake in Japan lends an additional interest to his mission. Dr. Schofield sailed on October 11, aboard the Empress of Australia to take up his duties in the East.

-Saturday Night (Toronto).

DONALD W. DOUGLAS, '14

Four huge U. S. army planes will attempt to fly around the world sometime in the spring of 1924. The planes will probably hop off from Newfoundland, and endeavor to make the coast of Ireland their first landing.

. These facts were recently revealed in an interview with Donald Douglas, Tech graduate and President of the Douglas Company of Santa Mona, Calif., which has been commissioned by the aviation section of the army to construct the fliers.

The planes are now being built. They will be similar to the navy torpedo planes, 24 of which recently flew over Boston in a squadron. Each plane will carry a pilot and mechanic, with gasolene tank capacity of 600 gallons, an extreme speed of 115 miles an hour, a cruising speed of 80 miles per hour and a cruising radius of 2,200 miles. The distance from Newfoundland to Ireland is figured by air as 1,900 miles.

When it became known that England, France and other European nations were contemplating a similar attempt to circumnavigate the globe, the army decided on a like trip. General Patrick, head of the army parameters are made a search for a plane.

on a like trip. General Patrick, head of the army aeronautic service, made a search for a plane.

He hit on the Douglas plane, after learning of the navy's success with this type. The planes are being built both for land and sea flying. It is thought that landings might be made in the Atlantic in the trip over if one of the planes developed trouble. The exact route of the flight is not known yet. A representative of the army aviation service has been making observations in Greenland and another has been doing likewise at the Behring Straits during the summer.

The Douglas planes will be practically all metal. The gasolene tanks will be carried in the wings in the same manner that the tanks were arranged in the plane that carried Lieutenants McCready and Kelley in their cross-country flight last July. It is estimated that the planes will be able to stay in the air twenty-eight hours at a stretch.

According to Mr. Douglas, time does not enter into the proposed army flight, and the planes will not seek to establish any speed records. The purpose of the around-the-globe trip will be to determine the maintenance possibilities of the planes away from their home base. Each plane will total 7,300 pounds in weight.

Douglas is said to be the youngest manufacturer of planes in the country, being but thirty-one years old. He is a native of California, but received his first lessons in flying when at Technology.

—Boston Post.

WILLIAM W. DRUMMEY, '16

A new departure in schoolhouse architecture is being worked up under a contract awarded by Schoolhouse Commissioner Glynn, after approval by Mayor Curley who believes the plan will prove a big saving to taxpayers. Briefly, the scheme is the standardization of small grade schools so that they will be constructed hereafter on a definite model which will allow for logical expansion of the building to meet the requirements of the population of the district. The architect of the work is William W. Drummey, 80 Boylston Street, Boston.

The initial building, the first one to be erected in the near future in Germantown, contains three classrooms, a nurses' room and a kindergarten on the first floor. The building will be expanded in units of four

classrooms, with the necessary service.

The plan is so designed that it is symmetrical about an axis taken through the center of the corridor. For the second addition, the first plan is folded over so that an additional four classrooms and a master's office are constructed over a new basement which contains a boys' playroom and additional space for lunchrooms, shops and storage.

—Boston City Record.

25 years and

GELETT BURGESS, '87

Gelett Burgess, who has not started a new periodical since the collapse of L'Enfant Terrible! last April, is now in London, writing for various English periodicals. He expects to bring out at least three new books next year: "Goop Babies, or, a Manual of Manners for Polite Infants," a series of verses and original illustrations, now running serially in St. Nicholas, will probably be published by the Century Company; "The Lively City o' Ligg," a set of modern fairy tales in which the characters are locomotives, pianos, lampposts, etc., will probably appear serially in an English magazine; and "Laughing Must I Love Thee," a novel of California life, whose hero, by the way, is a Technology graduate working in a California railroad surveying party, will run serially in the San Francisco Wave, and will be published early in the year. Mr. Burgess had a short story, "The Thunder Thief," in the May number of Harper's Magazine, and two others are to appear in the Century Magazine.

S. D. FLOOD, '90

S. D. Flood, '90, who is a lieutenant in the first battalion of the Illinois Naval Reserves, had the high honor of commanding the escort to President Mc-Kinley's carriage in the great Peace Jubilee Parade at Chicago on October 19, 1898.

FRANK W. ROLLINS, '81

Frank West Rollins was born in Concord, New Hampshire, February 24, 1860, son of Edward Henry and Ellen (West) Rollins. His family has been prominent in the affairs of the State for more than two centuries; his father represented New Hampshire in both houses of Congress. He was educated in the schools of Concord by Moses Woolson, at the Massachusetts Institute of Technology, and at the Harvard Law School. He was admitted to the bar in August, 1882. After practising his profession for a year, he entered the banking house of E. H. Rollins & Sons, becoming Vice-President of the house after its incorporation, and taking charge of the Boston office, although he retained his residence in Concord.

In politics he is a Republican. In 1895 he was elected to the State Senate, of which he was chosen president. He has served in various capacities in the National Guard, from private to assistant adjutant-general with the rank of lieutenant-colonel. In 1893, Dartmouth conferred upon him the degree of Master of Arts.

Mr. Rollins, who is an able speaker, made the address for the New England delegation, which journeyed to Canton to visit Mr. McKinley in 1896. In the last election he was made Governor of New Hampshire.

SAMUEL H. BROCKUNIER, '93

According to the Manitoba Free Press of Winnipeg, S. H. Brockunier, '93, who last May (1898) located a gold-quartz mining property on Elizabeth Lake in October, brought out specimens of ore assaying to a wonderful richness of \$20,000 a ton, almost pure gold. The working so far on the mine, named the "Virginia," consists of a tunnel forty feet long, which taps the vein fifty feet below the surface. The one great drawback is the way of getting to the property, which is seventy miles from Rat Portage, in an entirely new district; but the unlimited capital behind the company which Mr. Brockunier has formed, is expected to overcome this. A complete set of hoisting and pumping machinery is now on its way to the location.





WALTER HUMPHREYS, '97

WILLIAM JACKSON, '68

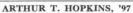
William Jackson, city engineer of Boston, is a native of Brighton, born March 13, 1848, son of Samuel and Mary Wright (Field) Jackson. His first ancestor in this country was Edward Jackson, who settled in Newton in 1639. His early education was obtained in the public schools of Brighton; and he was fitted for his profession as a civil engineer at the Massachusetts Institute of Technology, which he entered in 1865, with the Class of 1868. From the Institute, he went to a position at the Chestnut Hill Reservoir of the Boston Water Works, where he was employed from 1868 to 1870. Then he was assigned to the water works survey and the extension of the system in Brighton and West Roxbury. With this work, and with the private practice of engineering, he was occupied until 1876, when he was appointed assistant engineer on the Boston Main Drainage Works, one of the most important pieces of engineering construction ever undertaken in Boston. He continued in this department until April, 1885, and was then elected city engineer in place of Henry M. Wightman, deceased, which position he has held since.

During the construction of the Harvard Bridge over the Charles River, from 1887 to 1891, he was engineer for the Bridge Commissioners, and he is now chief engineer of the new Charlestown bridge and chief engineer of the proposed new Cambridge bridge.

M. D. BURNETT, '75

M. D. Burnett, '75, has been carrying on a new enterprise for the past two years and his efforts have resulted in the formation of The Eastern Coal and Coke Company in Cherokee County, Kansas. Mr. Burnett is General Manager of the company, which owns 3,000 acres of coal land, underlaid with both hard and soft coal. It is the former which is to be coked and sold to the consumers in Kansas City and Omaha; and it is the only good coking coal in the State. By the establishing of this supply of cheap and accessible fuel, manufacturers and industrial plants are expected to have an additional incentive to locate in the growing west.







These two gentlemen have come more into the public eye since 1899, even than they were before. These photographs were taken in the period around which Mr. Humphreys was assistant to Prof. Harry W. Tyler, '84, then Secretary of the Faculty, and Mr. Hopkins was no less a personage than First Editor of The Technology Review

WITH THE RGRADUATES

Today

THE MUSICAL CLUBS

The Musical Clubs start their winter itinerary on December 26 with a concert in Brooklyn. On the three evenings following concerts will be given in Newark, New Rochelle and Providence. About forty-

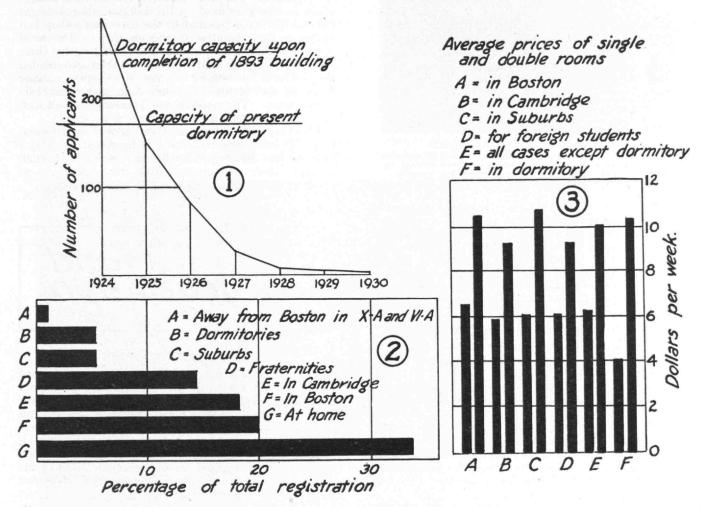
five men will make the trip.

The Brooklyn concert will be staged in the Academy of Music and will be broadcasted by radio from there. The usual dance will follow the performance which is given under the sponsorship of the Senior Class of Adelphi College.

The Newark concert is under the auspices of the Technology alumni in that city. It will be held in the roof garden of Proctor's Palace Theatre.

THE VITAMINE REVIVIVUS?

A more scientific outcrop of the great vitamine question, which took the form of cocoa and crackers at the Institute two years ago, seems once again to manifest itself this time in the form of a course on nutrition, offered to undergraduates by the Department of Hygiene. It is to be given under the super-



Data compiled by the Room Registry Department of the Technology Christian Association shows graphically the housing situation as it is today at the Institute. Three of the sets of their statistics are given above: Fig. 1 is plotted from the number of applications filed ahead for dormitory rooms with the Bursar's office as of November 8; Fig. 2 represents the percentage of the 2,950 students listed in the Directory for 1923-4 living at home, in dormitories, etc.; and Fig. 3 gives the average current prices for single and double rooms in various locations.

Fig. 1 presents a conclusive argument that more dormitories are needed. On November 8 the Bursar had applications on file from 290 men who wished to occupy dormitory accommodations next fall, from 150 who wished them for the fall of 1925, etc. The present dormitory holds 169 and the Class of 1893 Dormitory now under construction will have a capacity of about 80, so that for the next academic year 49 men who have already applied cannot be accommodated. More than one out of every three students live at home, 33.9% to be exact, as shown by Fig. 2. The number living in fraternities is slightly less than will be the case next term, since some of the Class

of 1927 who have recently joined fraternities had not taken up residence in their Chapter Houses at the time the data was compiled. Of the 32 fraternities at the Institute, 26 have houses, capable of rooming about 22 men per house or 19% of the student body. Prices for rooms in Boston and the suburbs are about equal. Cambridge provides cheaper facilities than either. Rooms for foreign students throughout the entire district average about the same as for Cambridge alone.

It is interesting to note the price data given in Fig. 3 which were averaged from 632 landlords offering accommodations for 2,416 students. A single room in Boston (\$6.82) is about \$1.00 higher than in Cambridge (\$5.88) and the price of a single in the suburbs is between the two (\$6.13). In double rooms, the suburbs and Boston proper charge about the same, \$10.80 and \$10.56, with Cambridge presenting an average offer at \$9.27. The average in all cases outside the Institute is \$6.22 for a single room and \$10.04 for a double room. Prices in the Institute dormitories average \$4.02 for single rooms and \$10.36 for double suites. for double suites.



W. H. ROBINSON, JR., '24 AND BEAVER
The Senior Class President is here shown bestowing his affection
upon the concrete beaver of which his class gained custody on
the night of the last Field Day. The location, one hazards,
is Somewhere in Fens

vision of Dr. George Morse, Medical Director of Technology, and is designed to prescribe a systematic diet for men who are not in the best physical condition. About twenty-five men are in roll at the present time, but the Medical Department has emphasized the fact that attendance is not restricted to those who are physically unfit. The class is to be held one afternoon a week.

NEWS OF TECH SHOW

Tech Show 1924, whose title is "The Hidden Idol" and whose author is W. T. Cook, '24, is already swiftly taking form under the guiding hand of Ralph L. Harlowe, who is coach of the cast and has general supervision over the production. The cast has already been chosen. Among its numbers is Hood Worthington, '25, who scored such an emphatic success in "The Sun Temple" last year as Serafina.

For the first time in some years the show is enjoying a continuity of coaching arrangements. Mr. Harlowe and Mr. Charles A. Young, his associate, were both connected with "The Sun Temple."

As of old, Miss Virginia Tanner is coach of ballet and chorus.

VITAL STATISTICS

Under the startling caption "Initiating Season Swamps Carpenter Shop with Orders," a reporter of *The Tech* seems to have written another of those perennial stories which are so dear to the hearts of all good journalistic victims. With a few changes in figures and minor details, *The Tech* may safely keep this story in the "morgue" for use next year, and many years thereafter.

The story begins: "Orders for paddles have been coming in to the carpenter's shop almost every day recently, and one night last week there was a man working on them until eight o'clock. Nine organizations have ordered a total of 177 of the weapons so far

this year.'

So far, the story represents possible fact. The writer does not stop here. He speculates: "If nine groups require 177, then the fifty odd fraternities and honorary societies must need over a thousand each year. On the supposition that each paddle is used on the customary portion of the human anatomy 25 times before it is broken or discarded, there must be 25,000 of the sharp reports of wood against the flesh of Technology students each year." He continues with specification, of the models being absorbed by the fall trade. "There are five separate patterns of paddles at the carpenter's shop in addition to special fancy designs which are sometimes called for. One fraternity requires eight paddles for each pledge, while another uses five. A third organization brought 150 barrel staves around to the carpenter's shop last winter to have handles shaped on them. The most popular paddle is one about three feet long by three inches wide. It is made for either one or two-handed There are others of varying shapes, ranging down to one about 18 inches long, but nearly six inches wide. The paddles are generally a half-inch thick, and are made from either oak or poplar.'

The Tech does not report the source of its information. Possibly the evidence was furnished by Major Smith, but more probably the writer's "human interest" story was gleaned from the background of

personal experience.

25 years ago.

THE MUSICAL CLUBS

The Glee, Mandolin, and Banjo Clubs have formed an association among themselves for more convenient financial management, and this winter have made some very decided hits. The manager has taken pains to arrange even more dances and receptions than were enjoyed last winter, and this feature of the trips is proving a great attraction. The clubs have some good musicians in them, and, as the representatives of the social side of undergraduate life, have met with decided success. On December 29 the clubs give a concert followed by a dance at Gloucester. The Wellesley concert has been set for January 7, Springfield, January 9 or 11, and Mt. Holyoke College, January 10.

L'AVENIR

L'Avenir is to give the play next Junior Week, an agreement having been made with the Walker Club to give plays alternate years. Rehearsals have begun, and a very creditable performance is assured. In addition to this work of preparation, L'Avenir still has weekly meetings, which are frequently addresses by French gentlemen.

DIE GESELLSCHAFT

The present work of the society is a study of the history of German literature, with Professor J. Keller's "Bilder Aus Der Deutschen Litteratur" as a textbook. The work is aided by lectures from members of the Faculty, with occasional "illustrated talks. Certain German plays will be studied in detail, and the productions of local German companies will be attended.

PROFESSIONAL SOCIETIES

The first meeting of the year of the Electrical Engineering Society was held October 19, in Room 22 Walker Building. The officers for the present year are President Harry L. Morse, '99; Vice-President, Frank F. Fowle, '99; and Secretary-Treasurer, Fred Tappan, '99. Regular meetings will be held on the first Wednesday evening of each month at 7.30 p.m. Mr. Hayes of the Bell Telephone Co., spoke on "Telephones on Shipboard," at the December meeting. Mr. Harrison W. Smith, '97, and Mr. M. de K. Thompson, '98, both of the Physical Department, have been elected honorary members of the society.

At a meeting of the Civil Engineering Society on Monday, October 31, J. W. Woollett, '99, gave a very interesting talk on the Albany Filtration Plant. Photographs and drawings were shown to illustrate

the construction of the plant.

The Mining Engineering Society met at 4.15 p.m. on November 21 in 26 Rogers. Mr. W. S. Hutchinson, '92, spoke on "Mine Management." He is local manager for the American Developing and Mining Co.

M. I. T. YACHT CLUB

A meeting of the M. I. T. Yacht Club was held November 16, and the following officers elected for the ensuing year: Commodore, T. W. Brigham, '00; Vice Commodore, Morgan Barney, '00; Rear Commodore, W. T. Aldrich, '01; Secretary A. E. Ritchie, '01; Treasurer, J. B. Laws, '01. Hovey, '02, was elected to active membership. At a meeting held on December 8, Vice Commodore Barney, Rear Commodore Aldrich, and S. C. Sears, '01 were appointed Regatta Committee for 1898–99. A committee composed of Commodore Brigham W. E. Aldrich, and A. E. Ritchie will arrange for a dinner to be held at Young's Hotel the first Saturday after New Year's.

The Yacht Club is one of the most successful clubs at Technology. The following yachts took part in the annual cruise held in Narragansett Bay in July: Venture, Commodore Swasey: Fantasie, E. Sturtevant; Narona, T. W. Brigham; Lotus, Morgan Barney; Ellide, W. T. Aldrich. Membership is restricted almost

exclusively to yacht owners.

DEBATING SOCIETY

The Technology Debating Society has elected the following officers, who will serve during the present term: President, H. F. Ashley, '00; Vice-President, S. W. St. Clair, '01; Secretary, N. L. Danforth, '01; Treasurer, O. G. Luyties, '00. All students of the Institute interested in debate are invited to join the Society. The qualifications for membership are simply the payment of the yearly dues, which amount to twenty-five cents.



THE CAST OF A FIN-DE-SIÈCLE WALKER CLUB PLAY

ATHLETICS

Today

HAINES AS CREW COACH

William Haines, veteran rowing instructor and coach of the 1920 Harvard varsity, the latest crew to defeat Yale, will coach Technology crews next season. He will join the Institute rowing staff on January 1. At the present time he is a member of the Harvard coaching organization, as he has been since the autumn of

Arthur W. Stevens, who has been connected with Technology rowing practically from the time of its inception, is chief of the coaching system. Professor Frederick S. Dellenbaugh, '21, who has been associated with Mr. Stevens during the last two years,

will continue as a member of the staff.

Mr. Haines was born in England in 1869 and early in his youth became known as one of the leading match oarsmen in that most active of rowing nations. Out of sixteen match races rowed over British championship courses, he won twelve, including a famous contest in which he defeated George Bubear for the British championship. For three years he stroked the British championship four.

After considerable coaching in England, particularly with the Royal Engineering College at Surrey, he was for three years the coach of the Berlin Rowing Club and the Berliner Ruder Verein. He also coached rowing clubs in Norway at Christiania, at Budapest, Hungary, on the river Danube and at Essen, Germany.

He then returned to England and engaged in sculling match racing and punting. He won the championship in the latter sport eight times. He was engaged by several prominent amateurs to coach them for the Diamond Sculls at Henley, among them being Guy Nickalls, who won the Diamonds twice, and D. C. R. Stuart, who won once. He coached Guy Nickalls' brother, Vivian, on the occasion of his winning the Amateur Championship of England, beating Guiness,

who had previously won the Diamond Sculls that year

He came to Boston in 1911 to take charge of the Union Boat Club crews, a position which he still holds in addition to his Harvard work. His Union Boat Club crews have won several championships in the American Henley at Philadelphia. One race in particular is worth mentioning in connection with his Union Boat Club work. This was in 1914 for the Grand Challenge Cup when his crew was beaten in the final heat by Harvard, which was coached by Robert F. Herrick then Chairman of the Harvard Rowing Committee.

Mr. Herrick thought so much of Mr. Haines' work that he engaged him to coach the crews at Harvard. This was in the fall of 1915. In 1916 Harvard beat Cornell on the Charles River Basin and Yale at New London, making a record for the Thames River course of 20m. 2s. In 1918 Harvard won the two-mile race with Yale on the Housatonic; Yale won in 1919 and Mr. Haines was in charge of Harvard in 1920.

Harvard rowing for five years, during which period Harvard defeated Yale three times. He was succeeded as head coach in 1922 by Dr. R. Heber Howe. Jr. Mr. Haines was the last coach to win over

Yale.

ATHLETIC RESULTS TO DECEMBER 15th

Cross-Country

Nov. 17—N. E. I. C. A. A. at Franklin Park, Boston; Bates 45, Maine 57, N. H. State 113, Bow-doin 136, Holy Cross 143, M. I. T. 153, Williams 156, Brown 163, Boston College 184, Boston University 213, Mass. Agricultural College 260.

Nov. 26—I. C. A.A. A. A. at Van Cortlandt Park, New York City; Syracuse 58, Columbia 66, Harvard 100, Maine 116, Princeton 121, Penn State 143, Yale 186, Dartmouth 224, Pennsylvania 237, M. I. T. 239, Cornell 262, New York University 360, C. C. N. Y. 409.

Soccer

Nov. 17-M. I. T. 2, Worcester P. I. 0, at Cambridge.

Hockey

Dec. 7-Boston University 7, M. I. T. 1, at the Arena, Boston.

THE CALENDAR OF FUTURE SPORTS.

-Basket Ball, Northeastern University at Jan. 5 Cambridge.

Basket Ball, Harvard at Hemenway Gym, Jan.

Cambridge.

Jan. 9—Hockey, Harvard at the Arena, Boston. Jan. 11—Wrestling, B. Y. M. C. U. at Cambridge. Jan. 12—Basket Ball, Brown at Providence.

Jan. 16—Hockey, Yale at New Haven. Jan. 17—Basket Ball, Tufts at Medford. Jan. 19—Basket Ball, Rhode Island State College

at Cambridge. Jan. 19—Hockey, Cornell at Ithaca.
Jan. 19—Swimming, Lowell Textile School at Lowell.
Jan. 19—Wrestling, Yale at New Haven.
Jan. 23—Basket Ball, Brown at Cambridge.

-Mass. Agricultural College at Cambridge. -Basket Ball, Stevens Institute of Technol-Jan. 26-Feb. 1-

ogy at Cambridge.

Feb. Swimming, Amherst at Amherst. Track, B. A. A. Games at Boston.
-Wrestling, U. S. N. A. at Annapolis. Feb.

Feb. Basket Ball, Brooklyn Polytechnic Institute Feb.

at Brooklyn.

-Swimming, Wesleyan at Wesleyan

-Basket Ball, C. C. N. Y. at New York.

-Hockey, Dartmouth at Hanover. Feb. Feb.

Feb. 9-Wrestling, U. S. M. A. at West Point. Feb.

CROSS-COUNTRY

The Varsity Cross-Country team which easily defeated Cornell and Harvard and lost to Princeton did not fare well in either the New Englands or the Intercollegiates at Van Cortlandt Park. Early in the season Technology was the favorite in the New Englands until injuries in the dual run with Princeton removed several of her best contenders. Then Frank Kanaly's men from the University of Maine were conceded the victory, but Bates upset the forecast and won, Maine taking second; New Hampshire State, third; Bowdoin, fourth; and Technology, fifth. Holy Cross, Williams, Brown, Boston College, Boston University and Massachusetts Aggies followed in the order named. A. F. Fricker. '25, was the first Institute scorer. He finished

9th. The rest of the Technology team took these places: 31, 33, 37, and 43.

Syracuse won the I. C. A. A. A. A. race with Columbia second, Harvard third; Maine, fourth; Princeton, fifth; Penn. State, sixth; Yale, seventh; Dartmouth, eighth; Pennsylvania, ninth; M. I. T., tenth; Cornell, eleventh; New York University, twelfth; and C. C. N. Y., thirteenth.

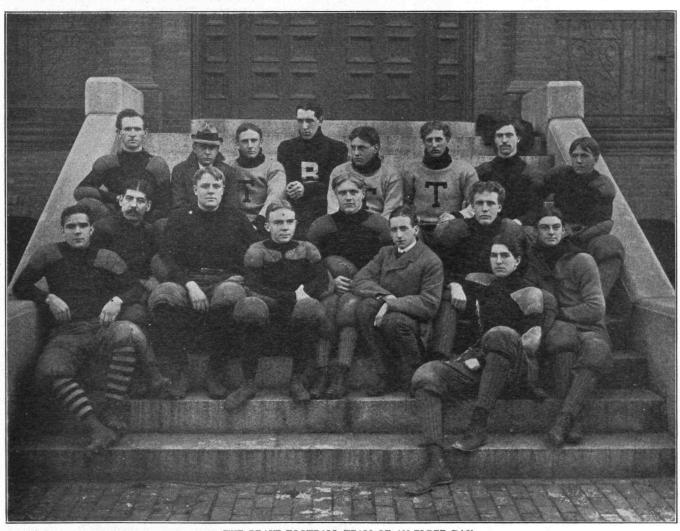
While injuries in the dual meets may account in a measure for the unexpected showing in these two runs, the athletic authorities are inclined to attribute the failure to other reasons. Next year's training policy is to be varied, in that plans call for two varsity crosscountry teams; one trained for hill-and-dale work and the other for flat courses. This theory is based on the belief that one type of man can do his best if he races on courses which are practically level, such as at Van Cortlandt Park, while another type of man finds himself outdistanced in the flat work, but has the stamina which will carry him in the lead if the test includes a great deal of climbing. The New Englands being at Franklin Park, which course is largely hills, the team which is to run will be composed of "hill men" and its schedule of dual meets will be arranged with that The other team which will represent the Institute at Van Cortlandt Park, where the Four A run is an annual fixture, will compete in dual meets over flat courses. The plan has the additional feature

of conforming to the general athletic policy in that it will interest a larger number of competitors.

25 years ago.

A NEW GYM

For several years Technology has been hoping for a new gymnasium. The finances of the Institute, however, did not permit of the expenditure of the necessary sum, and we have been obliged to content ourselves with a few improvements in the present building. But our hopes are to be realized in the near future. There is now a movement under foot among Technology alumni to raise the necessary money by subscription and to build a gymnasium as a memorial to General Walker. No more fitting memorial could be erected to the man who believed so thoroughly in the systematic development of the body as well as the mind. The scheme deserves the hearty support of every Technology alumnus and we hope to see the plans carried to a speedy and successful completion.



THE BRAVE FOOTBALL TEAM OF AN ELDER DAY

It won five games, lost two and tied one, in the fall of '99. B. E. Morse, '99, was captain of it. Where now is its like?

TRACK

In track athletics all our energies are ultimately directed toward winning the annual meet which takes place at Worcester, in May, between the New England colleges. In 1894 Technology won the championship. Last year we scored 21 points against the winner's 24, and lowered the records in the 220-yard hurdles and the two-mile bicycle race. Nearly all of last year's team are back, and the outlook for the '99 meet is encouraging.

The fall handicap games were held on Holmes Field, October 29th. The weather was cold and wet, yet the times in the running events were very good. The former two-mile record was beaten by 32 2/5 seconds.

In order to induce more men to train regularly throughout the year, a member of the Athletic Association has offered two cups — one for the man who wins the most points in the weights, and the other for the one who has the most points in the remaining events. The meets in which the points count are those of this school year.

The annual closed Indoor Meet of the Athletic Association was held in the "Gym" Saturday evening, December 17th, and, athletically, was a great success.

The four classes were very evenly matched for a while, but '01 and '02 soon left the upper class teams to themselves and began the battle for the honors, which was only settled when Baxter cleared the bar in the pole vault at 9 feet 7¼ inches, with Shepard, '01, and Pope, '02, tied for second and third places, thus giving the meet to '01 by 3¼ points

the meet to '01 by $3\frac{1}{2}$ points.

The work of Horr, '02, was particularly gratifying. He captured the 35-yard dash in time only 1/5 of a second behind Grosvenor's world record, and established a new Tech record in the 35-yard hurdles. The dash and 35-yard hurdles were close, but in the jumps Baxter won easily. The shot put was closely contested by Copp, '99, and Crane, '02, the former winning with a put of 34 feet 6 inches, third place going to McDonald, '01.

The potato race, always amusing and exciting, was hotly contested, the final heat being won by Horr; McMasters, '00, second, and Emery, '00, third. The fence vault was easy for Flynn, '99, at 6 feet 8 inches.

The pole vault was stubbornly contested, and being placed at the end of the list of events made the meet seem rather long drawn out. The event itself was interesting enough and ended as above described.

RECORDS OF THE M. I. T. A. A. AS OF DECEMBER, 1898

Event	Time or Distance	Record Holder	Made On
20-Yard Dash	3 s.	F. W. Lord, '93	
35-Yard Dash	4 s.	A. W. Grosvenor, '98	March 14, 1896 (Also World's Record)
100-Yard Dash	10 ² / ₅ s.	R. W. Carr, '95 A. W. Grosvenor, '98	May 6, 1895 May 27, 1896
220-Yard Dash	23 s.	R. W. Carr, '95	May 11, 1894
440-Yard Dash	51 ¹ ₅ s.	J. A. Rockwell, '96	May 23, 1894
880-Yard Run	2 m. 6 s.	T. Spencer, '91	May 2, 1891
One-Mile Run	4 m. $37\frac{4}{5}$ s.	G. Clapp, '95	May 11, 1894
Two-Mile Run	10 m. 44 ⁴ / ₅ s.	D. M. Pray, '99	Oct. 29, 1898
Cross-Country Run 120-Yard	27 m. 58 s.	H. A. B. Campbell, '99	Mar. 26, 1898
Hurdles 220-Yard	163 s.	B. Hurd, '96	May 6, 1895
Hurdles	25 ⁴ s.	G. Burch, '99	May 21, 1898
One-mile Walk		D. Mayer, '98	May 27, 1896
Two-mile Bicycle Race	5 m. 1 ⁴ / ₅ s.	R. Murray, '01	April 30, 1898
Running High Jump	6 ft. $0\frac{1}{2}$ in.	C. D. Heywood, '93	May 4, 1892
Standing High Jump	4 ft. 10 in.	F. R. Young, '86	
Running Broad Jump	22 ft. 1½ in.	A. W. Grosvenor, '98	Oct. 24, 1896
Standing Broad Jump	10 ft. $1\frac{1}{2}$ in.	L. Burnett, '96	
Three Broad Jumps	32 ft. 8½ in.	E. A. Boeske, '96	Dec. 8, 1894
Fence Vault	7 ft. 2½ in.	A. H. Green, '96	Dec. 21, 1895
Running High Kick	9 ft. 3½ in.	C. D. Heywood, '93	Dec. 12, 1891
Pole Vault	10 ft. 7 in.	J. Crane, Jr., '92	Dec. 12, 1891
16-Pound Shot	10 11. 7 111.	J. Crane, Jr., 92	
Put	37 ft. 8 ³ / ₄ in.	H. W. Jones, '98	May 1, 1897
Discus Throw	91 ft. $7\frac{1}{2}$ in.	G. I. Copp, '99	May 21, 1898
16-pound Ham-	-	5 - 130 W	
mer Throw		H. W. Jones, '98	
Twenty-foot	5 1 -	O II Comite 10"	Dec 12 1001
Rope Climb	5½ s.	O. H. Carrier, '95	Dec. 12, 1891
Potato Race	$50\frac{1}{5}$ s.	J. A. Rockwell, '96	Dec. 8, 1894

THE CANE RUSH

The Freshman-Sophomore cane rush and football game took place on November 22d at the South End Grounds. The rush was awarded to the Sophomores, the score being 15 hands to 11; and the football game was won by the Freshmen by a score of 11 to 0. Transparencies, Freshman standards, and brass bands were conspicuously absent. The field, consequently, was almost totally deprived of the customary local color and variety of former rushes. The attendance was about eight hundred.

THE ADVISORY COUNCIL ON ATHLETICS

Some time ago a committee was appointed to investigate the subject of physical training at Technology. In accordance with the recommendation of this committee, the Advisory Council on Athletics was organized last February and given the supervision and control of the finances and policy of the Athletic Association. The members of the Council, which held the first meeting of the season on December 8th at the Technology Club are: President, Frank H. Briggs, '81; Vice-President Harry L. Morse, '99; Treasurer Frank H. Peabody, 77; Acting Secretary Roland W. Stebbins, '99; Thomas Hibbard, '75; John A. Rockwell, '96; and Guy P. Burch, '99. Last year, much was accomplished in the introduction of business methods into the affairs of the Athletic Association. Other measures have done much to establish our athletics on a firmer basis. This year, the Advisory Council should be able not only to carry on the work of last year but to extend its sphere of usefulness.

IEWS FROM THALLIMNI CLUB

PITTSBURGH ASSOCIATION M. I. T.

As no notes have been printed in the Review this year concerning the activities of our association, a detailed report

since the first of the year is submitted below.

since the first of the year is submitted below.

The officers for the year 1923-24, who were elected in May, 1923, are as follows: President, W. H. Horton, '10; Vice-President, P. N. Critchlow, '06; Secretary and Treasurer, G. W. Ousler, '16; Executive Committee, Harold Lockett, '10, L. K. Yoder, '95 and I. W. Wilson, '11. All of our officers are very active and we have had so far a very successful year.

Every Friday at 12.30 p.m. we hold a luncheon in the Chamber of Commerce Dining Room, at which we have an average attendance of fifteen members. If at any time there are any M. I. T. men in town we would be glad to have them

are any M. I. T. men in town we would be glad to have them

join us at these luncheons.

We have had two smokers so far this year, one on October 6 in the University Club and the other on November 3 in the Pittsburgh Athletic Club. The first meeting was very well attended, about thirty-one members being present, and at the second we had an increased attendance of thirty-six. At these evening meetings we have a general talk among the men, have

evening meetings we have a general talk among the men, have eats and from ten o'clock to midnight we play cards. Everyone seems to enjoy himself immensely.

At our meeting on November 3 we had the pleasure of entertaining Mr. Elisha Lee, '92, the new Vice-President of the Pennsylvania Railroad, with headquarters in Pittsburgh. At the conclusion of the meeting he stated that he had spent a

very enjoyable evening.

Mr. H. A. Rapelye, one of our past secretaries, and one of the most active members which we have ever had, has left the Pittsburgh District and is now in Kansas City in the tobacco business. We are certainly sorry to lose such an active member

from our association.

We have planned a calendar of the events for the 1923-24 season and any Tech men who are in the district at the time of these events, are invited to come and be our guests at any or these events, are invited to come and be our guests at any or all of our smokers and dinners. All of the meetings will be held in the Breakfast Room of the University Club, Natalie Street. Following is the calendar: Friday, December 7, Smoker, 8.00 p.m.; Thursday, January 17, Dinner, 6.30 p.m. (Orville B. Denison, Executive Secretary of the Alumni Association will be present at this dinner); Friday, February 8, Smoker, 8.00 p.m.; Friday, March 7, Smoker, 8.00 p.m.; Friday, April 4, Smoker, 8.00 p.m.; Dinner (date to be determined later).

G. W. Ousler, '16, Secretary, Duquesne Light Co., Pittsburgh, Pa.

ST. LOUIS SOCIETY OF THE M. I. T.

A meeting of the St. Louis Technology Club was held on November 13, at the Missouri Athletic Association. courtesy of Mr. Ernest C. Klipstein made this meeting place

available for us.

Professor Samuel Prescott, Head of the Department of Biology and Public Health, being in St. Louis for the inauguration of President Hadley at Washington University, was our honored and delightful guest. Professor Prescott pointed out in a very refreshing way the fundamental purposes of the Alumni Associations, some of the high spots of student undergraduate activities, their scope and influence, and suggested the establishing of a scholarship to the Institute by the St. Louis Alumni. This scholarship was immediately agreed upon by the Alumni, and underwritten by Mr. Leslie Dana of the Class of '94. Thus, the St. Louis Alumni shows the way to other Alumni Associations, by being the first association to establish such an alumni scholarship.

Plans were made for quarterly meetings to be held during the next year, these meetings to be made of exceptional interest to Technology Alumni by a program well defined and prearranged. The first meeting is to be held on December 17

All out-of-town Tech men are invited to attend this dinner, arrangements for which can be made through the Secretary.

Lloyd B. Van da Linda, '18, Secretary, New England Mutual Life Insurance Co., St. Louis, Mo.

TECHNOLOGY CLUB OF RHODE ISLAND

On October 18 the club met in the rooms of the Turks Head Club for its first regular meeting of the fall term. About fifty men sat down to the banquet and the choice viands placed before us in tempting array instilled in us a feeling of satisfaction comparable only to the exquisite pleasure experienced when the passing of time permitted our distinguished guest to voice his thoughts in the well-chosen language which is ever at his command. mand.

Dr. Allan W. Rowe, '01, was the post-prandial spokesman and as the uninterrupted flow of words fell from his lips we listened like men inspired and marveled that such a man should have gone to Tech. "The Institute Plan of Athletics" was his subject and in glowing words he described our athletic system which seeks to provide "the greatest good for the greatest

number.

As our guests on this occasion, we had the principals of four of the city high schools and the athletic director of the public schools of Providence. They were much interested in Dr. Rowe's subject and entered readily into the diagnosism which followed subject and entered readily into the discussion which followed.

The meeting adjourned in a cloud of smoke!

Our next meeting was held on November 15 when the club met in the Providence Engineering Society Rooms for a "social evening." After the business meeting the members were introduced to a game called "Rump" whose main object was to cause the "galloping dominoes" to agree. In other words, in rolling the dice only pairs counted and the one rolling the most pairs took home the victor's reward. The growd divided up into pairs took home the victor's reward. The crowd divided up into tables of four and the battle was on.

Played progressively, the game proved interesting, but the contestants often forgot and prayed for "naturals" instead of

Coffee, round doughnuts and square cheese topped off the

evening and sent the Holy Rollers home satisfied.

The latest additions to our charmed circle are: Maurice S. Chapin, '10, Henry G. Dooley, '20, and Raymond E. Wilson, '12.
The club is making big preparations for the visit of the Combined Musical Clubs to Providence on the night of Saturday, December 29. The concert is to be held in the Churchill House and is to be followed by the customary dance where the disciples of Terpsichore can hold forth until the night watchman does his duty. In conformity with Dr. Stratton's suggestion the proceeds of the concert are to form the nucleus of a scholarship fund for M. I. T. and to further this end all alumni of the Institute who may be in and about Providence on this night are earnestly requested to attend.

Norris G. Abbott, Jr., '20, Secretary-Treasurer, 107 Providence Street, Providence, R. I.

M. I. T. CLUB OF CENTRAL NEW YORK

On November 15 the M. I. T. Club of Central New York

On November 15 the M. I. T. Club of Central New York held its first dinner and business meeting of the season.

A new slate of officers were elected and installed as follows: President, Louis Mitchell, '15, 515 Walnut Avenue, Syracuse, N. Y.; Vice-President, L. A. Stewart, '18, 12 Jewett Place, Utica, N. Y.; Secretary-Treasurer, Harold Kaiser, '19, The Solvay Club House, Syracuse, N. Y.; and Alumni Representative, Irving S. Merrell, '96, Merrell-Soule Company, Syracuse, N. Y. After the election of officers, Dr. H. W. Jordan, one of the club's older members, gave an informal talk on his experiences in chemistry and in the development of big business. He made some startling predictions of the outcome of certain types of big business and at the same time outlined how engineers should act for self-protection.

act for self-protection.

We also enjoyed a talk by Mr. Bonta, architect (the renowned traveler of the club), who is but shortly returned from Japan, where he has been studying and practicing architecture. He gave a vivid description of building operations in Japan. One generally thinks of bamboo poles, painted paper, etc., when Japanese architecture is mentioned, but Mr. Bonta talked in Japanese architecture is mentioned, but Mr. Bonta talked in terms of reinforced concrete and best modern fireproof construction, all done with a speed which would make some American contractors sit up and take note.

I am sure that I, as well as many others who heard the talk, had some of their views about Japan and the Japanese somewhat changed.

Charles W. Nitschke, '11, Secretary, '11, Secretary, '12, Secretary, '13, Secretary, '13, Secretary, '14, Secretary, '14, Secretary, '15, Secretary, '15, Secretary, '15, Secretary, '15, Secretary, '15, Secretary, '17, Secret

1810 South State Street, Syracuse, N. Y.

NEW HAVEN COUNTY TECHNOLOGY CLUB

We had our first winter meeting on Saturday, November 17, and had about thirty Tech men present.

Orville B. Denison arrived in New Haven the Thursday preceding the meeting, and by personally calling on a large number of Tech men before the meeting, he did much towards getting the men out.

We arranged a schedule for Dennie so that his calls could be made in groups, and took him to the Yale-Princeton game

while he was here.

At the meeting, dinner was served, and after a talk by Denison and a few words by Chester Dunlop, our President, the evening was devoted to seeing motion pictures which Dennie brought,

and to a free-for-all bowling match.

As a club, the New Haven County Technology Club is very enthusiastic about a man to take a vital interest in the local Technology clubs, and we are glad to have been among the first to meet Denison. He certainly made a hit - and seems very well adapted for his new line of work.

Charles R. Haynes was elected to represent us on the Alumni Council to take the place of Arthur T. Hopkins who has left

New Haven to make his home in Boston.

Herbert R. Polleys, '18, Secretary, 1523 Chapel Street, New Haven, Conn.

TECHNOLOGY CLUB OF BUFFALO

The fall dinner of the Technology Club of Buffalo was held the University Club on November 22. Thirty alumni were at the University Club on November 22. present and all entered heartly into putting away a goodly supply of food. Jack Facey at the piano, Whit Ferguson leading the songs, and the choral results from the audience formed a combination enjoyed by all.

Dr. Haslam, who happened to be in Buffalo visiting the X-A men studying at Bethlehem Steel Co., favored us with a very interesting talk. I think that the most striking thing he told us was the fact that the construction work on the new

dormitories was progressing rapidly

We all joined in welcoming Bill Ryan, the new Instructor in charge of X-A in Buffalo. Sol Stone, our President, told the club of plans for a big get-together about January 10. O. B. Denison, the new Executive Secretary of the Alumni Association, will be with us and every effort is being made to get Dr. Stratton to honor us at the same time. All are very anxious to meet the new President and plans are under way to get out a record crowd.

After the dinner the gang took over the pool room and bowling alleys. Bill Spaulding's team of Fats carried away the honors but not until after a bloody battle between Dan Potter and the Secretary, in which both made a strike on the final ball, surprising all. The final score was 125 to 126 in favor of

A resolution of sympathy was sent to the family of the late General Edmond Hayes, who for several years had been Honorary President of our club here in Buffalo. About twentyfive Technology alumni attended the funeral services.

A. E. Sampson, a former President of the Buffalo Technology Club, was elected to represent us on the Alumni Council in

place of Mr. Hinckley who recently resigned.

There are 132 alumni of Tech now living in Buffalo according to our records. We find the weekly luncheons at the Chamber of Commerce on Fridays at 12.30 are getting more and more popular.

W. R. Barker, '21, Secretary, 485 Ashland Avenue, Buffalo, N. Y.

TECHNOLOGY CLUB OF NEW YORK

The season's activities at the club opened with the Hallowe'en party on October 31. The entertainment committee provided a series of side shows, which were all well patronized and which In addition, the "home talent" amused all those present. furnished a number of entertaining acts, after which refreshments were served.

This season Monday nights are reserved for talks by a number of prominent men, the first of which was given by Dr. Percy Stickney Grant. Members that happen to be in the city on such nights are invited to the clubhouse for these inter-

esting entertainments.

A bridge tournament is scheduled to start in the near future. The alterations to the new kitchen are now completed and restaurant service begins on Thanksgiving Day. All three meals are served daily, and the club is now able to accommodate members with an excellent and reasonable meal service.

Mr. Kaludy Spaulding has taken charge of the club and will give his undivided attention to its welfare.

Robert J. Marlow, '17, Secretary, 17 Gramercy Park, New York, N. Y.

WASHINGTON SOCIETY OF THE MASSACHUSETTS INSTITUTE OF TECHNOLOGY

Fourteen members of the Washington Society of the Massachusetts Institute of Technology gathered around the festive board at the Cosmos Club on Wednesday, November 7, 1923, to greet Professor E. F. Miller of our Alma Mater, and to listen his enticing tale of the recent developments at Technology.

Professor Miller brought to the society some attractive and valuable suggestions concerning coöperative measures between the Washington Society and the Institute. After this preliminary statement, the Professor held our rapt attention with his story of the many interesting phases of college life on the Charles.

We were especially interested in the development of the new and special courses having to do with coördination in this work with the government departments, with the development of student activities, the recent investigation into the cost of instruction, and especially of the splendid progress made and impetus given to the work of the Institute under the leadership of President Stratton.

The first weekly luncheon of the season given by the Washington Society, Massachusetts Institute of Technology, was held Friday, November 2, at the University Club. This was a Friday, November 2, at the University Club. This was a "speaker" luncheon, at which Mr. F. J. Bailey, Chairman of the Personnel Classification Board, explained the subject of "The Classification of the Government Service.

The society meets regularly for luncheon every Friday, but the first Friday of each month is a special occasion in that a speaker of prominence is to be the guest of the society and is

to give a more or less informal talk.

The society is desirous of coöperating with Technology in every possible way. President McDaniel has a plan for a liaison service which he hopes will work out advantageously.

W. Malcolm Corse, '99, Secretary,

1701 Massachusetts Avenue, Washington, D. C.

TECHNOLOGY CLUB OF CHICAGO

The last few months many motor cars in this locality have exhibited beneath their license numbers a small sign that pro-claimed to the world that their home port was none other than "Chicago the City of Go." Five hundred Tech men in the "City of Go"—thousands more in cities of "Gone." Class of 1924, consider wisely!

Our Tuesday noon luncheons at the Chicago Engineers' Club are well attended. Those who appreciate good fellowship and are within convenient distance sign the register every week. Besides these "regulars," who by the way are the backbone of the organization, a few dozen drop in each week to renew and extend their circle of acquaintance. Of all habits, good, bad, and indifferent, there are none so helpful to yourself and pleasing to the rest of us as the habit of regular Tuesday noon attendance.

We are especially happy to welcome visitors to the city. For the benefit of those who are in Chicago Tuesday noon, let me give you a sure fire formula. First, tell yourself that during luncheon hour you are going to free your mind from business and refresh yourself in an atmosphere that abounds in that happy fellowship of school associations. Having made this decision wisely, all there is left to do is to hop into a Yellow Cab and tell the driver, "Chicago Engineers' Club," and before you know it there you are among friends.

Due to the demands of his business life, Mr. George Thompson Wooley, '15, II, resigned from the office of Secretary. The boys voted to accept his resignation — with regret — as George had discharged the duties of his office with that gratifying

efficiency which could not pass unappreciated.

Thursday evening, December 20, the club is planning to engineer a dinner and smoker to give our Executive Secretary a rousing welcome. Mr. Denison is going to show us some movies and tell us about the 'Stute. We are going to show him a compound of Chicago enthusiasm and the far-famed Tech spirit and let him draw his own conclusions. Each and every banqueteer has signed an agreement to this effect: ". . . before the evening is over I am going to meet every Tech man on the premises even if I do miss my breakfast." The big doings will be chronicled in the next Review.

In every club there are at least two kinds of members: those who attend, and those who do not know what they are missing. A campaign is in the embryo to get every graduate or former student within a mile of the loop to at least one luncheon. A strategy map has been prepared, showing the location of every-one on our list. Starting on November 1 each member was designated on the map by a deep black tack, signifying the absence of enlightenment (for the time being). It is only necessary to register at a luncheon to merit a designation of less sombre hue.

Harris B. McIntyre, '22, Secretar, General Automotive Corp., 600 W. Jackson Bldg., Chicago, Ill. One of the largest motor car manufacturers desires to correspond with a man whose experience and ability qualify him to accept a position leading to that of district manager.

Address The Technology Review, Box No. B1027.

NEWS FROM THE CLASSES

News from even-numbered classes is published in issues dated November, January, March and May. News from odd-numbered classes is published in issues dated December, February, April and July. The only exceptions to this rule are those classes whose Secretaries have guaranteed the appearance of notes in every issue.

These classes are: 1896, 1901, 1902, 1905, 1907, 1910, 1911, 1912, 1914, 1915, 1916, 1917, 1918, 1920, 1921, 1922 and 1923. Other classes adhere to the alternate schedule.

Due to strict limitation of space, the Review is unable to publish lists of address changes of members of the Association. The Alumni Office in Room 3-209,

M. I. T., will supply a requested address or will act as the forwarding agent for any letters addressed to members of the Association in its care.

1868

ROBERT H. RICHARDS, Secretary, Carter Hall, Warrenton, Va. One of our fine members has left us this year. William J. Ladd died on June 25, 1923. Ladd was a business man and had his office on Court Street, Boston. He was a warm friend of my brother George and with him was a member of the Toby Club. They had many interesting experiences together. He and I saw little of each other after graduation, which was mainly my fault. I fear I have been lazy about keeping up with the members of the class.

Joe Revere reports he spent three months salmon fishing on the Margaree River of Cape Breton and had a wonderful time there. His largest fish weighed thirty-two pounds and gave him the time of his life landing him. He has just spent three days visiting Eben S. Stevens at Quinebaugand; a great three days it was. One day they motored up to Lancaster and took Eli Forbes by surprise and carried him over to Worcester and dined him there. This seems to be the only way to get Eli out and to a meeting of his old classmates to whom he is very dear. Joe says, "Eben hasn't got no pig yet."

D. M. Wheeler has been heard from. He was at the meeting

D. M. Wheeler has been heard from. He was at the meeting at Pittsfield held by the Executive Secretary and sent his kind regards to the members of the class.

1874

CHARLES F. READ, Secretary, Old State House, Boston, Mass.

We received a letter from Hamilton at Portland, Oregon, early in the summer, giving a most enthusiastic account of the "Naturopath" treatment which he has taken, and which has practically cured him of the high blood pressure that has laid him up for the past five years. It is the treatment followed by Dr. Abrams of San Francisco and described in a pamphlet called "Eva" published by the Pearson Magazine Co., New York.

At the dinner of the first ten classes given at the City Club on June 1, in honor of President Stratton, the Secretary, among other speakers, told of the historical work he had been doing for the Institute in assembling in book form the biographies and portraits of the Incorporators, the Members of the Corporation, the Members of the Faculty, and the Benefactors of the Institute from the beginning. Members of '74 who partook of the dinner were Barrus, Chase, Elliot, (G. T.), Leatherbee, Mansfield, Nickerson, and Read.

The Fiftieth Anniversary of the class graduation occurs next June, and preparations are being outlined for its observance. As one of the events promised for that occasion, President Stratton has invited the class to be his guests at a luncheon to be given at his house in Cambridge. Subjects concerning the anniversary were informally discussed at the class lunch which occurred at the City Club on October 4, those present being Barrus, the two Elliots, Mansfield, Nickerson, Read and Russ.

The Secretary's daughter, Edith B. Read, was quietly married to Waldo M. Brown of Wellesley Hills on August 2. Chase has recently made one of his periodical trips through the West, during which he had the pleasure of calling on Blunt and Mudge in Chicago, Perkins in Pasadena and Crosby in

We regret to record the death of our classmate, Emil Schwab, which occurred on May 12. He was deeply interested in all the

affairs of the class.

1876

John R. Freeman, Secretary, 815 Grosvenor Bldg., Providence, R. I.

No notes received from the Secretary.

1878

E. P. Collier, Secretary, 165 Winthrop Road, Brookline, Mass. The Class of '78 will be the guests of Mrs. C. M. Baker, 113 Ivy Street, Brookline, on the evening of January 4, 1924. Following is a very interesting letter dated October 19 from

Takuma Dan's son, Ino Dan:

"Though we have been through so many terrible struggles against all nature, I think we now won it. We tires, but all are well and happy. Nobody was injured or dead. All in good health. At the very moment of catastrophy father was at his friend's villa at sea side and was bidding good-bye to his friend, as it was nearly noon, and rolled down from veranda into the garden, and the house smashed before his eyes. Mother was waiting him at our country house, but as it was on a large rock, house wasn't damaged so heavily. I and my wife and my invalid sister Yuki were at Tokio. We had plenty of space in our garden to shelter. We run into a bamboo bush and slept two nights there watching burning town and colossall smoke column over us. For two days and nights we were just in Dante's inferno. Earthquakes, fire, thirsty, hunger, and, after, a heavy shower. Then, after, epidemics. Tramways, railways, electricity, gas service, telephone, telegraph, water system, even motor cars were not useful at all at such a moment. Twen were plenty of motor cars, but they couldn't get any petrols.

were plenty of motor cars, but they couldn't get any petrols.

"It was just like San Francisco earthquake. But it was much worse as Tokio had 2,500,000 population and 1,500,000 lost their houses. Food suply was also awfully difficult. It was almost impossible to get such a enormous quantity of provision promptly and to distribute it. But Army and Navy did it splendidly. They allowed them to eat even fine ducks and storks in the park. Zoölogical lost her monkeys and foxes and all the herds of nice jolly inhabitants. But people who are dining every day with delicious dishes of beefstakes cannot call the intruders cruel. Also we saw a lady on the wayside died with her pekiny in her arms. It was not sad. Nobody was crying. It was too sad to cry. Everybody was deadly pale and silent, and they marched day and night to escape into the country. Most of them left everything behind. As the streets were blocked up with goods on any kinds of vehicles. They run away running under the wagons. So many died among the goods which took fire as well as houses. Those who were in the park also died by burning goods. A park a little larger than Boston Common contained 43,000 people died. The policeman who told the people to shelter the fire in that park was found also died at the gate of the place, and they found examining the body, that he had committed suicide before he was dead by fire. It was situated about the centre of the town and in that quarter in eighty-six policeman only six left alive. They knew their job. Others all died staying in the fire to the last moment in struggling to let the citizens escape. Boston Common is not safe at all. I will explain it. It was at two minutes before noon when shock came. All the kitchens were busy. Houses colapted. Fire broke out. In every block there was oil shops. It encouraged fearful fire. Chemical laboratories were also the source of fire. Many schools burned from them. September wind was strong. It was first of September and we had rather little rain before it. The summer heat dried

"As there was no protection on the roof after shaking off the tiles, the fire run from roof to roof. There was no water, they used river water and all the water they got. Even underground pool of wasted water. There were many cases that fire engine couldn't come out by garrage corruption. They took down many houses. It was succusful indeed. But you must imagine no town is easy to get dinamited so quickly in such

"Now we will go back to the park which I mentioned before. Flat park, larger than Boston Common, was surrounded by fire. It was in the sea of fire which extended fifteen miles square. As that space was the only spot without fire, suddenly fearful whirlwind of flame attacked the place which carried men and women some hundred yards. Goods also took fire, but it was

STANDARD PLATE GLASS CORPORATION

DEPENDABLE SERVICE

BOSTON

HARTFORD

CAMBRIDGE

the whirlwind which brought the gaz and they all suffocated. At such attack no modern scientific houses are all right. Iron framed or boned concrete are better, as it will not come down,

but it will also need reconstruction.

"As our house was at the outskirt of the town, far from fire, on a small hill of good foundation, and as it was elastic timber house made without nails but corded in to fix them after Japanese methods it showed good resistance against quakes, though my house which is not so good like that of Father's, used bricks for chimney which came right over me and I had to run out

for chimney which came right over me and I had to run out carrying my wife in my arms into the garden.

"We lost two thirds of Tokio and whole town of Yokohama. People fled into the country. It is a ruin of enormous area. There are nothing but ruins in Tokio, but it is settling day by day. We expect trying winter, but I believe we can carry on all right. We have good food, warm clothes, tramway and railways, electric lights. If anything will happen we will run to you. I have happened to take your Ambassador, Mr. and Mrs. Woods into our garden. We shared the hardship together. We camped together. And we guarded ourselves as we did not know what would happen in such moment. Mr. Woods when still there was shakes wirelessed to the President and to the Asiatic fleet of the States. The commander of the fleet without waiting orders from Washington put up the anchor and came to Tokio from Philipine with foods. It was a marvel for us to be carried out so quickly. The deep gratitude of our people to the States is shown by everyone of us. We have American Red Crosses food supplies and many things in Tokio. Public feeling toward America is completely changed, I mean Improved, and many misunderstandings for years had swept away in Japan. I many misunderstandings for years had swept away in Japan. I add here some important news about my uncle, Viscount Kaneko. His house was burned leaving everything in, but he was safe as he was out of Tokio that day. His second daughter, who is the mother of four children, and wife of a banker, Mr. Kawasaki, who was in America on that day, died, struck by falling chimney. She had her baby in her arm, which was safe under mother."

George H. Barton, Secretary, 89 Trowbridge St., Cambridge, Mass.

Since sending in the notes for the November number of the Review, nothing of special interest concerning the members has been received except the enclosed letter from Chase. The Secretary is very sorry that he failed to receive a visit from Chase

during his visit East.

during his visit East.

During the autumn the Secretary has been very busy with the field lessons in Geology connected with his School and in finishing two works on Genealogy: "The Descendants of Elisha Wheeler and Mary Loring" and "The Ancestors of Mary S. Hunt." During the last few years he has become very much interested in Genealogy as an avocation and has had the pleasure and honor of being President of "The Association of the Descendants of Edmund Rice"; of being Vice-President of "The Stone Family Association," and Secretary of "The Association of the Descendants of Elisha Wheeler and Mary Loring." He still bolds the two latter offices. holds the two latter offices.

The Teachers' School of Science, of which the Secretary is Director, is devoted to giving the teachers of Greater Boston an opportunity to receive instruction of college grade in the four natural sciences: Botany, Geography, Geology, and Zoölogy, while carrying on their regular school work. This is accomplished by all the courses being given on Saturdays and in the evenings. The tuition fee is merely nominal, there being none for the field lessons and only \$2.50 each for each of the indoor courses of thirty hours each. The Director would like to extend an invi-

thirty hours each. The Director would like to extend an invitation to any Technology man to visit his own classroom in Geology at 5 Jarvis Street, Cambridge, on any Saturday until April 1, except during the holidays. Class hours: 10.00 a.m. to 12.00 m., and 2.00 to 4.00 p.m.

Following is a letter from our classmate, Edwin E. Chase: "I have just looked over the November Technology Review and in the news of '80 I see it charged that one Chase of Denver failed to keep his summer appointment to visit one Barton at Lake Boone, Mass. Considering, however, that said Barton admits having been at twenty different places this summer, further evidence is required that Chase aforesaid did not call and found nobody home. That might well have been, but ain't what was.

what was.

"Truth is that Chase expected to buy a Dodge car in Providence and take a real vacation touring New England and in that case his trail would have been sidetracked at Lake Boone, much to his enjoyment. The tremendous business activity, however, in the East had absorbed all Dodge cars available worker, in the East had absorbed all Dougle cars available such that he plunged a little deeper and bought a Nash car in Worcester and oh, boy, didn't he have some vacation, covering 3200 miles of the choice parts of Maine, New Hampshire, and finally Rhode Island where Chase, '84, his brother, carries on

big mill enterprises.
"The route north from Worcester left Lake Boone in the distant suburbs which I trust explains his shortcomings, but he will show up next year, George, if he has to circle the globe to reach you. It was the middle of October before his return trip to Providence and he concluded you were then busy in Cambridge. A good friend harbored me for two weeks on the Penobscot River and a complete camping outfit from a \$50.00 tent

to a \$0.05 wash basin added variety to the life.
"I played golf on fourteen different links and also studied the various enterprises of New England which may give some pointers to the new graduates hunting a job. Most of the enterprises had the birch and maple as a basis, and at Rumford and Berlin, N. H., I found the starting point of the newspaper in the shape of mountains of cord wood ready to be converted into wood pulp. At Hancock, N. H., I found the home of the old-fashioned clothes pin, at Dover, the common spool and the window sash, in Maine the modern home of the antique furniture of our forefathers so pronounced that when a small boy was asked what his father did for a living, he replied, 'He bores worm holes in furniture.' A blueberry farm in New Hampshire absorbs 400 boys and girls at the height of the berry season and the summer boarder is the best crop of all. To a mining engineer the old open cut iron mine at Franconia, N. H., and the smelter therewith, now well preserved, are most interesting. The stoves and maple sirup kettles, made 150 years ago, were the real things and some of them are still in use. The old smelter stack, some 50 feet high, has a covered top and the accumulated dust and dirt of a century has sufficed to grow a birch tree 20 feet high on the top of stack, But what a contrast between that narrow 2-15 ft. vein and its one stack with the fierce glow that the writer saw when he passed through Gary at night on his return trip to Denver.

"If none of the alumni have never stopped at Sunset Hill House, Sugar Hill, N. H., near Franconia, then they have missed something. Page me there, October 1, 1924. New England is still full of the real Puritan ancestry, and some others, and I look forward to next year's visit with great pleasure. My Nash is in cold storage at my old home in Lowell, Mass., and you know, 'Where a man's car is, there his heart is also.'

"The only near accident I met with on the whole trip had its origin in the genus Skunk, whom I found nosing around my food in the tent. I could think of nothing in my S. B. degree with which to combat same, so I merely told kitty to help himself to all he wanted and no matter leaving a tip. He took my advice and meandered off, but, O. G., what a close call. I found the animal aforesaid very plentiful, but no mosquitoes or black

flies, so I should worry.
"Would sure like to have seen you and I hereby invite myself to your summer camp next summer and will roll in on my own power, tackle you at golf, fishing, hiking, or any of the sports which us youngsters of '80 still delight in."

1881

Frank H. Briggs, Secretary, Hotel Puritan, Boston, Mass.

Whom have we had in our class prominent since graduation? Frank W. Rollins: National Guard New Hampshire from Private to Governor of the State.

James Lund: worked up in the Merrimac Chemical Co. from a small point to Manager of Works and Vice-President of the

company.

George A. Mower: Captain Football team; also Captain Tug of War Champions of New England, Representative of Sturtevant Blower Co., etc., in Europe.

Ben Collins: big feature in Massachusetts politics for twenty

Harry Cutler: made his pile out in Milwaukee and was not satisfied, and just because his daughter was in college at Wellesley, came back to Brookline and made some more here.

Ira Abbott: who made the Technology Club of New York. Tom Barnes: a big man in the United Fruit Co's develop-

ment in the West Indies.

Frank Briggs: prominent in Boston in political, military, and athletic affairs. Even now he has not relaxed his interest. He is President of the New England Association of the Amateur Athletic Union, and a member of the American Olympic Committee to arrange for Olympiad, 1924.

Arthur Winslow: he made his pile in mines in British Co-

lumbia and Colorado.

Ned Warren: a Real Ornithologist.



The Most Beautiful Spot in America

forms the setting for the Lenox and Brunswick hotels. Located at Copley Square, bordering Boston's exclusive residential district, yet within a short walk of the theatres and better shops.

The hub of motor routes radiating to those points of historical interest for which Boston is famed.

Come to the Lenox or Brunswick where the comfort, service and restful atmosphere remind you of a carefully managed homewhere the well-being of a guest is always the first consideration.

The BRUNSWICK

The LENOX

Boylston St. at Clarendon

Boylston St. at Exeter

L. C. PRIOR, President and Managing Director

John Duff: a Real Physician.

Frank Noble: Chief Civil Engineer of the Anaconda Copper Mining Co. (he has "some job"

Godfrey Cabot: international reputation in Aviation. Bill Churchill: some portrait artist. Gave as his contribution

1916, the painting of General Walker.
And there's a lot more. Professors! Architects! Merchants! Engineers! Selectmen (like Oscar Munyon), and many Retired, and many Masons (the last two classes enumerated will be perfectly satisfied if I do not specify names).

1882

Walter B. Snow, Secretary, 115 Russell Ave., Watertown, Mass.

Harry E. Snow, who was with the class for a time in the early days, has recently given his address as 83 Hamilton Place, New York City.

Writing some time ago from Portland, Oregon, where he is President of the Eastern and Western Lumber Company, Winslow B. Ayer says: "I have lived in this city since 1883 and my business has not taken me very often to the East. I have never had the pleasure of attending any of the reunions, but at the age of sixty-two I am full of hope and am looking forward to the pleasure, sometime in the future, of greeting old friends.'

Harvey S. Chase, Secretary, 84 State St., Boston, Mass.

The Fortieth Reunion was eminently successful. much fun - good golf, a unique show and a few braved the cool sea for swims, while others enjoyed motor drives about the Cape. All enjoyed it and a unanimous vote was given to hold similar ones at the same place again in two or three years, prefer-

ably two.

The "Gables" at Hyannisport is excellently fitted to enter-

tain a class of the size of '33.

In this Twenty-fifth Anniversary Number of the Review it

may be of interest to reproduce the notes which your Secretary wrote in January, 1899. Here they are:

"The class gift to the Technology Club (a library of President Walker's works) will be installed in the club as soon as two new volumes, now in press, are published.—Some replies to secretary's circulars concerning the fifteenth Year Book are yet to be received.—Class meeting early in 1899 will be held at the Technology Club.—Geo. J. Foran, with Geo. F. Blake Mfg. Co., has recovered from a severe illness lasting the greater part of the year.—Horace B. Gale barely escaped an election to the Legislature at the recent balloting in Natick, Mass.—H. . Bardwell appeared recently and looked over the club. -T. Gibbons did the same some time ago, as also G. H. Bryant, who is doing extremely good work as principal of the Townsend Industrial School at Newport. — The Secretary desires all members, graduates, or specials to consider themselves welcome at his office at all times. A lunch at the club is a good thing!— F. O. Harriman was the owner, a year or two ago, of a large ranch in Mexico, having gone there as engineer on railroad work. He married and settled there, but we have had no recent word from him.

1884

HARRY W. TYLER, Secretary, M. I. T., Cambridge, Mass.

Ten members of the Class of '84 dined at the University Club on Thursday, November 8: Appleton, Coburn, Dearborn, Fitch, Gill, Lull, Prescott, Puffer, Tyler, Whitney.
Dr. Stratton, as a member of the Class of '84 at the Uni-

versity of Illinois, was elected to honorary membership.

Much interest was expressed in the Fortieth Anniversary and Dearborn, Gill, and Whitney were appointed a committee to make plans for it.

Letters were read from Bardwell, Bridgeman, Bridgman, Bunce, Doane, French, Hammett, Holder, Johnson, Lyle, Newell, Pratt, Rich, Ryder, and A. W. Whitney.

Newell's letter reads in part as follows:
"It is with sincere regret that I find it impossible to be in Boston at the Fortieth Anniversary of the graduation of the Class of '84.

"Your announcement that this is the Fortieth Anniversary

quite swept me off my feet as it sounds extremely venerable. have not yet been able to adjust myself to the appreciation that time has gone by so rapidly but find that I have still firmly fixed in my mind the idea that we are still young men with lots of work ahead of us. This at least is my situation where in affairs of national policy it seems as though we were only at the beginning of active work.

"Just now I am full of the details of organization of a conference in New Orleans, as indicated by this letterhead and ac-

A Life of Francis Amasa Walker

Third President of the Massachusetts Institute of Technology

By James Phinney Munroe

ENERAL WALKER was eminent as a soldier, a statistician, an economist, an administrator, an educator, and, above all, as a man.

He was born in 1840, graduated at Amherst in 1860, fought through the Civil War and was breveted Brigadier General at twenty-five; was Superintendent of the Census at twenty-nine, Commissioner of Indian Affairs at thirty, Professor in Yale at thirty-one, President of the Massachusetts Institute of Technology at forty-one, and died at fifty-seven.

The Opinion of the Press

Boston Transcript: "The first thing which strikes the reader of this biography is the many sidedness not only in character but in achievement of its subject.... Yet after all it is as the 'Preserver' of Technology that he will be given his most lasting fame, although Walker the president and administrator does not dim Walker the man. President Hadley of Yale once said that General Walker knew more things worth knowing than any man of his acquaintance....Mr Munroe is eminently fitted for his task as biographer."

Chicago Evening Post: "Mr. Munroe's life reads like a novel and is much more entertaining than the average book of fiction. It brings honour where honour is due, and should therefore itself receive the same award."

N. Y. Evening Post: "This biography places before us a vivid and varied picture of a man who combined passionate energy with calm, common sense, intense earnestness with delightful humour, aggressive independence

of thought with sincere respect for the heritage of the past, unflagging zeal for the public good with a total absence of priggishness or cant, intellectual ardor with splendid gallantry as a soldier, and a keen interest always in whatever makes for physical and excellence."

The Nation: "Mr. Munroe's volume is distinguished by its fine balance in the presentation of the character and achievements of a many-sided being. To him, Walker has never ceased to be a living influence, and it is Walker the man who stands forth in these pages."

N. Y. Herald: "Mr. Munroe is well qualified for the great task of this biography, as he was secretary of the faculty during a large part of Walker's administration of the Institute and has had access to all available data. Besides that, he is a master of a clear, simple and vigorous style, which makes the narrative highly readable. He has also shown excellent judgment in the selection and arrangement of his material."

The volume contains 437 octavo pages of text, exclusive of the index and seven half-tone illustrations. The price is \$4.00.

Henry Holt and Company, Publishers 19 West 44th Street, New York, N. Y. To Herred age of the Arte of Frenche Agreement Herred Age of Herred Age

companying invitation. It is along the line of my life work companying invitation. It is along the line of my life work in developing a national policy of land reclamation and settlement, providing opportunities for small self-supporting farm homes. The success in the West is stimulating the South and arousing the imagination of some of the people there. They are beginning to realize that there are great opportunities and that it is possible to provide homes for many thousand families on lands which are now unused - though when I get off on this I am apt to write a book!

"Give my best regards to all who are present and express the wish to each and everyone that if he comes by way of Washington, he will at least call me up on my house telephone, find out where I am and take lunch with me at the Cosmos

Club so that we can talk over old times.

1886

ARTHUR G. ROBBINS, Secretary, M. I. T., Cambridge, Mass.

Miller has recently been in Washington to represent the Institute at the inauguration of President Lewis of the George

Washington University.

While in Washington, by direction of President Stratton, Miller visited General Williams, Chief of Ordnance, Admiral Robison, Admiral Tompkins, Admiral Block, Admiral Wilson and Commander Penn of the Post Graduates School at Annapolis. He also had a pleasant interview with General John A. Johnston, the Commander of the North Eastern Department during the War.

An opportunity was afforded to visit the Navy Yard, the

Gun Shop of the Navy and the Bureau of Standards.

He also was a guest of the Washington Alumni at the Cosmos

WILLIAM G. Snow, Secretary, 112 Water St., Boston, Mass.

On the occasion of the Twenty-fifth Anniversary of the

on the occasion of the Iwenty-litth Anniversary of the founding of The Technology Review, some of the notes in the first number published may be of interest.

Holton was then First Sergeant in Troup C, First Ohio Volunteer Cavalry (it was when the Spanish War was on).

B. R. T. Collins was with the Illinois Naval Reserves on the Scorpion and saw some very active service off Cuba. George D. Moore was a First Lieutenant in the Twenty-third U. S. Infantry. He later rose to the rank of Lieutenant-Colonel and saw active service in France about twenty years later.

The Chicago News for September 12, 1923, had the interesting

statement which follows regarding one of our classmates:
"Louis A. Ferguson, Vice-President in charge of operation
of the Commonwealth Edison Company, will celebrate his thirty-fifth anniversary as an employee of the firm and predecessor companies at a dinner to be given in his honor to-night at the

"Three hundred employees of the company who have been associated with him ten years or more will be in attendance, it was announced this morning. A morocco-covered book, containing the signatures of 1,000 men and women who have worked under Mr. Ferguson in the last decade, will be presented

to him, together with a silver service.

"Mr. Ferguson's entire business and professional life has been spent in the employment of the Edison Company and predecessor companies. He was born at Dorchester, Mass., fifty-six years ago and educated in the public schools of Boston and the Dorchester High School. During his last year in high school he passed an examination for admittance to West Point. His family, however, persuaded him to enter the Massachusetts Institute of Technology instead of the military academy. He was graduated from the Institute with honors. He entered the employ of the Chicago Edison Company in the fall of 1888 and his first job was testing street mains in the underground department. From this position he advanced to others until he finally became Vice-President in charge of operation of the Commonwealth Edison Company.'

1889

Walter H. Kilham, Secretary, 9 Park St., Boston, Mass.

Earl W. Gannett was married on November 7 in New York City to Miss Edith Yancey. They will be at home cember 1 at the Birchwood Apartment, Omaha, Neb. They will be at home after De-

The couple have the congratulations and best wishes of the entire class, even if Earl was a little slow about it. These recent wedding announcements are doing a lot to cheer up this column and the Secretary has in mind several other bachelors in the class that he would like to hear from, between now and the Annual Dinner in March.

Charles W. Power, now Mayor of Pittsfield, Mass., has been elected President of the Pittsfield National Bank.

We quote from an appreciative sketch of Henry M. Hobart hich appeared in a recent issue of the Electrical World. "Though which appeared in a recent issue of the Electrical World. "Though for some years a consulting engineer of the General Electric Company at Schenectady he keeps in close touch with Lynn and at the recent Swampscott convention renewed his friendship with engineers here. He was associated under Mr. Parshall in the office building on Center Street with Dr. Steinmetz, E. B. Raymond and others, and was later secured for work in London by Mr. Parshall. While there, they brought out their big book on 'Armature Windings,' published in 1895, a copy of which is in the library, second 68. His book, 'Electric Motors' appeared in 1904, and he has produced many other books. Of late years he has specialized in electric welding and was on the welding committee of the United States Shipping Board."

1890

George L. Gilmore, Secretary, Lexington, Mass.

A card has been received by your Secretary from Frederick H. Dodge, which was mailed at Shanghai on October 23. Fred is on a trip around the world to be gone probably about a year, and writes as follows:

and writes as follows:

"This is a trip you should take. Everything so far most interesting, and we are told the best is yet to come.

"Missed the eastern part of Japan on account of earthquake. We arrived at Yokohama five days after the quake and saw what a terrible calamity it was. Came to Pekin via western Japan — Korea and Manchuria, and arrived just in time to see the new President take the chair."

commander Ernest H. Brownell (C. E. C.) U. S. N., has been transferred from the Portsmouth Navy Yard, to the U. S. Naval Station, Pearl Harbor, T. H.

Ernest A. LeSueur's address is now 71½ Sparks Street,

Ottawa, Ont.

In order to get more class news, your Secretary urges that you fellows get busy and drop him a line occasionally. Let him know what you are doing, and in this way the rest of the class can be kept more closely in touch with the members.

Do not forget that our Thirty-fifth Anniversary comes in 1925, and we shall expect a large gathering of the gang, together with their better-halves and daughters — also sons.

1892

JOHN W. HALL, Secretary, 8 Hillside St., Roxbury, Mass. CHARLES H. CHASE, Assistant Secretary, Tufts College, Mass.

The following is taken from the magazine of the Standard

Oil Co. of California:

"News of the death of Arthur Grover Ranlett, who died on Monday, September 17, came as a distinct shock to the company and cast a gloom over the entire organization of the Pipe Line Department, where he was so intimately known and

respected.

"Mr. Ranlett's duties brought him in contact with the pumping stations of the Bakersfield-Richmond trunk line, and his appearance was always welcomed by the employees and their families, for his abounding good-humor, inimitable conversation, and remarkable memory made him an unfailing enjoyable com-

panion.
"Mr. Ranlett was born in San Francisco on June 11, 1870. and received his earlier education in the Oakland schools; later he entered the Massachusetts Institute of Technology, at Boston, where subsequently he was graduated as a mining engineer. He then returned to California and joined his father, who had extensive mining interests in Amador County. At one time Mr. Ranlett was Postmaster of the town of Ranlett, in Amador County, so named in honor of his father. In the first part of the present century Mr. Ranlett's attention turned to the pioneer petroleum activities in the state, and on May 9, 1902, he entered the company's employ, taking an active part in the construction work of the pipe-line system and later in its maintenance.

"Mr. Ranlett's passing is lamented by everyone who had the privilege of his acquaintance and friendship, and with this loss a character is gone whose place can never be filled."

Here are a few words from Kales:
"I had a delightful time in China and I saw a number of Murry Warner's old friends there who were very kind to me. On my way out I stopped for four or five days with Fred Harvey at his home in Gault, California. Fred is a wonderful fellow, just as full of fun and good spirits as ever. He weighs over 260 pounds, and has a long beard, so you would hardly recognize him as the baby-faced youth we used to know.

And here is an interesting note from Sweetser:
"In the November Technology Review, I saw your note regarding the '92 men. It is good to hear from the fellows, and

Have You Started the New Year Right

with a Program of Life Insurance?

IF not, why not begin it now when your health is at its best and your rate is lower than it ever will be again?

Then add to this beginning systematically until you have adequate protection.

Remember that when you earn \$10,000 a year, your real value capitalized at 5% would be \$200.000.

Have you created an estate in proper proportion to your present value?

Sixty-one Years in Business

Now insuring over One Billion Eight Hundred Million Dollars in policies on 3,300,000 lives IFE INSURANCE COMPAN

1892 Continued

possibly they would like to hear what I have been trying to do

this fall.

"I am now especially interested in a crusade against high ash in coal. The more I see of the detailed costs of making coke, pig iron, and steel, the more I realize the terrible waste there is in shipping 'extraneous ash' in coal.

"Enclosed is a reprint from a monthly magazine called *The Freeburner*. This is published by the men at the Freeburn coal mines of The Portsmouth By-Product Coke Company, a subsidiary of The American Rolling Mill Company (The Coke Company is owned jointly by The American Rolling Mill Company, and The Wheeling Steel Corporation).

"The American Rolling Mill Company has just established a Coal Inspection Department, and we are expecting to get

great results in economy.

"I am still Assistant to the First Vice-President of the American Rolling Mill Company, also Vice-President of The Portsmouth By-Product Coke Company, and in September I was re-elected for my sixth term as President of The Southern Ohio Pig Iron and Coke Association."

1894

Samuel C. Prescott, Secretary, M. I. T., Cambridge, Mass.

In School and Society for September 1, it is reported that after an absence of five years, spent in practicing architecture, H. K. McGoodwin has returned to Carnegie Institute of Technology as Head of the Department of Architecture and Dean

of the Faculty of the College of Fine Arts.

C. G. Abbot, famous during our undergraduate days as a physicist of promise, has lived up to all predictions and is Assistant Secretary of the Smithsonian Institution in Washington. In addition to the extensive and highly scientific work he has carried out as the Director of the Astro-Physical Laboratory, has carried out as the Director of the Astro-Physical Laboratory, in which he has measured the heat of the sun and done other almost impossible things, Abbot has blossomed out also as a writer of popular science. One of the volumes of the Young People's Shelf of Science, edited by Dr. E. E. Slosson of Washington, "Everyday Mysteries" with a sub-title, "Secrets of Science in the Home," has come from the facile pen of Abbot and is not only good science, but it is told in a way that cannot fail to interest both old and young. The subjects taken are those of everyday occurrence and the train of scientific phenomena underlying these processes as almost commonplace, has been described so interestingly and so vividly that one is held spellbound by the stories. To one who has had as personal and intimate contact with the author as it was the Secretary's good fortune to have many years, it is easy to read between the lines and to see that these stories are but the graphic description of events from his own career from boyhood until the present time. In this book are reflected the wide range of subjects which the man of science encounters. These brief stories are very picturesque, carry the reader to different parts of the world, and here by the way, the pictures are accurate because the writer has in most instances been there and they give in a simple and clear manner some of the results which have been accomplished by the application of science to everyday problems. I feel sure that every '94 man will be interested to see this book and the Secretary can affirm from experience in his own household that it is fulfilling its mission in interesting boys and girls of grammar and high school age. The class may well be proud of its distinguished scientist.

well be proud of its distinguished scientist.

In a somewhat different field, another member of the class has recently gained considerable fame. George Owen is not only a Professor at Technology, but is the designer of the fast boats taking part in the summer races along the New England coast. During the summer one of Owen's, the "Q" boat, "Aquanno," defeated a much-praised product of the famous designer, Herreshoff, and other fast boats of the New York fleet in a series of races at Larchmont. George is not only able to design boats, but he is also able to sail them with proficiency. It is evident that his only claim to fame is not in having a son who made nine H's in his athletic career at Harvard.

The Secretary has recently had an opportunity to meet some of his classmates in the Middle West. Attending the inaugurations of the new Chancellor at Washington University in St. Louis and the new President at the University of Missouri

augurations of the new Chancellor at Washington University in St. Louis and the new President at the University of Missouri at Columbia, Mo., he visited St. Louis and Chicago. In St. Louis he was royally entertained by Dana and Klipstein and also had the pleasure of meeting a small group of other Institute men at luncheon. Both Dana and Klipstein were deeply interested in the effects of the class and the Secretary feels guite ested in the affairs of the class and the Secretary feels quite safe in saying that they are looking forward with no small interest to the Thirtieth Reunion next June. Both these gentle-

men have not only been highly successful in their own personal professions, but have entered into the civic life of St. Louis, have given freely of their time and energy to its organizations of a business, historical and civic character and have demonstrated in the most practical way how Technology training may fit men for public service as well as for successful private business experience. The Secretary is deeply grateful to them for a most enjoyable stay in St. Louis. Dana's son will enter the Institute next year. It may be of interest to record here also that as a result of this visit, the St. Louis alumni have guaranteed a scholarship at Technology for one or more St. Louis boys.

In Chicago the only '94 man I was able to call upon was

In Chicago the only '94 man I was able to call upon was Arthur Clement. He has been unusually active in business, having recently become a member of the firm of Clement, Curtis & Co., in addition to carrying on his regular business. He has also become a member of the Chicago Board of Trade. During the past summer Clement was travelling abroad with his nephew who was recently graduated from the Institute. In spite of a very exacting business, Clement finds time to enjoy outdoor life and is looking forward to a trip within the next few weeks to the Gulf Coast for duck shooting and general enjoyment. He is also looking forward to the class reunion and says that nothing will keep him away.

A recent visitor at the Institute was J. C. Kimberly whose

A recent visitor at the Institute was J. C. Kimberly whose son is a prominent member of the sophomore class. Kimberly has also promised to be on hand next June and like others who have been interviewed, suggests that no better form of reunion could be devised than that held at the time of our Twenty-fifth.

Two other sons of '94 men have come to the attention of the Secretary. J. K. Phelan is now an Assistant in the Department of Physics, having been graduated last year from Tufts in the Engineering Department and is at the present time taking some advanced work in addition to assisting at the Institute.

R. F. Piper, the son of Walter, is a member of the freshman class and his name has recently appeared on the ballot as a candidate for the Institute Committee which, as all will remember, is a group of undergraduates that dominates and controls student affairs at the Institute.

Once more the Secretary wishes to draw the attention of all members of the class to the forthcoming reunion. A circular letter will soon be prepared, but it seems to be evident from

型

Robert A. Boit & Company

Insurance
OF ALL KINDS

40 Kilby Street

Boston, Mass.

36

the correspondence and letters that the enjoyment found at the Twenty-fifth Reunion will stimulate all those who were present at that time to make an effort to return next year. As this is the Thirtieth Anniversary of our escape from the Institute, there should be a big turnout and the Secretary can say with confidence that those who come will not have occasion to regret it. For all who find it necessary or possible to make business trips to Boston, let me suggest that you so arrange your affairs as to make this trip next June and thus combine business with pleasure. On the other hand, don't let business interfere with pleasure for after all, this is an occasion which gives the thrill which comes once in a lifetime. Let everyone, therefore, plan to come himself and urge his fellow-classmates to do so.

During the past summer and fall, John N. Ferguson, Senior Assistant Engineer with the Massachusetts Department of Public Works, was sent to Rochester, N. Y., by the Attorney General to make investigations in connection with the claim of the Commonwealth to title of land at Ontario Beach Park. The City of Rochester had condemned this property on the lake front. The question of title is now being heard before Master Wade H. Ellis, who was appointed by the U. S. Supreme

While in Rochester, Ferguson had the pleasure of addressing the local society of the American Association of Engineers on Boston Harbor Development, including the construction of the Commonwealth Dry Dock at South Boston.

Ferguson's visit in Rochester was made an enjoyable one through the hospitality of our classmate, Lovejoy, Vice-President of the Eastman Kodak Company.

1895

Frank A. Bourne, Secretary, 177 State St., Boston, Mass.

Gerard Swope gave the opening lecture in the Aldred Course at Tech on November 9. On November 22, '95 entertained Swope at luncheon at the Exchange Club in Boston. Those present were: Swope, Booth, Bourne, Hannah, Whorf, Rockwell, G. Clapp, Jackson, W. D. Parker, Winkley, Fuller, R. Williams, S. S. Clark, Chase, Tucker, Brackett, Barrows, Hall, Haven, Littlefield, Cutter — twenty-one in all, and the tear-stained letters that came in from those who did not appear added to the joy of the occasion.

Henry Jackson, associated with Templeton Brothers, has developed a new return steam trap, and is putting it on the market. After eighteen years' experience as a consulting engineer, he and his associates feel that they have developed the best trap that has ever been offered. Their first year of business has been fairly good, and with a continuance of prosperous conditions they expect to put the trap on the map this coming

In honor of the Twenty-fifth Anniversary of The Review,' 95 recalls the time when Huxley was Secretary, when Azel Ames, Butler Ames, Kotzschmar, Tillinghast were in the Spanish War; Coburn was on the U. S. S. Southery; Belknap was in Nicaragua on professional work connected with the canal; Farquhar was just back from Paris and had not commenced the practice of architecture; Brackett was in the Boston office of the J. L. Mott Iron Works, and was married in February to Miss Florence E. Barker; Loring was Superintendent of construction of the new Masonic Temple in Boston; Rickey was Foreman of the Department of Mechanical Construction of the General Electric Company, Schenectady; Zapf was with the American Prism Company; Rourke was Assistant Roadmaster on the Panama Railroad, Hannah was teaching drawing at the M. I. T.; Meserve was studying chemistry at the University in Munich; and LeBosquet was Superintendent of W. H. Swift & Co., manufacturers of chemicals.

Jackson is disturbed because he does not get notices. If there are any other members of '95 who do not receive theirs, will they please notify the Secretary who, by the way, does not do the addressing, and, of course, never makes mistakes himself?

Frank Miller returned, early in October, from a four-month trip around the country with his family. Starting in June, he went by water, via Panama, stopping at Central American ports, to Los Angeles; by rail up the coast to Seattle; by water to Victoria, B. C.; by rail to Red Gap Junction, on the Canadian National Railway, westerly towards Prince Rupert; and returned through Edmonton, Saskatoon, Winnipeg, Duluth, and Chicago. The trip included three thousand miles of automobile trips in California, from San Francisco as a base, several weeks on horseback in the mountains of California, and a trip in the saddle over the divide in Canada, down the Arctic Slope, beyond all railroads and settlements. While in the wilderness, he and his son, Richard, shot some game.

His observations on business conditions along the path of his trip are interesting: "The volume of shipping handled by the Canal is astonishing. It seems certain that a Nicaraguan

Financing Your Foreign Trade



OUR Foreign Department offers every modern banking facility for financing international trade. It is always glad to furnish information on trade conditions, and the credit of foreign names, and to quote, upon request, rates of exchange on all countries.

Old Colony Trust Company

Boston, Massachusetts

Canal must be opened in ten or twenty years. The possibilities of development in Central America seem limited only by the instability of the people. If a practical dictatorship can be exercised there (and only under that condition), the same results can be accomplished as in Panama. Also under the same condition, unlimited capital could be invested in the country, with

great profit.
"The growth of Los Angeles almost defies description. At first only a resort, then a fruit producing section, then a manua few years ago there were barely half a dozen docks; now there are two hundred. The population is increasing at the rate of over a hundred thousand per year.

"The tourist travel was very heavy in California last summer.

The railroads carried more passengers than in the year of the San Francisco and San Diego fairs.—Fruit has been over-produced in California during the past season. Canneries, carrying over old stocks, have not purchased apricots, peaches, and other fruits which remained on the trees.—Cattle raisers all along the Pacific Coast and in Canada are going out of the business. In June, hides were the lowest in history.-Mining

operations on the Pacific Coast were suspended last summer.

"Gasoline was sold by private enterprise in Panama, in June, for 46c; by the U. S. government for 16c. In Los Angeles, an oversupply reduced the price to 5c; in San Francisco, in August, it was 14c; in Edmonton, in September, it was 60c.

"More lumber was produced, and less distributed, this year

than last. After the Japanese earthquake, the market stiffened. Business was normal in San Francisco, Seattle, and Portland.

Business was normal in San Francisco, Seattle, and Portland. Portland has been gaining on Seattle during the last ten years. "In Canada, business was very quiet, and collections poor. In Winnipeg, common labor commanded 45c per hour and carpenters 85c. Labor was migrating to the United States. The English labor which has been coming over is unsatisfactory. Prices of goods manufactured in Canada were higher than for the same goods manufactured in the United States. Wheat was overproduced this year five-hundred million bushels, four-hundred million last year two-hundred million before the War. hundred million last year, two-hundred million before the War. A controversy is on between British Columbia and the rest of the Dominion over freight rates; British Columbia hopes to divert part of the wheat business west, by means of adjusted rates, building elevators and shipping by water.

"Generally, in Western United States and Canada, there has been a surplus of animal, vegetable, and mineral production this year, with consequent falling prices since last February."

The monthly luncheons of the New York Ninety-five Luncheon Club were resumed on October 29. Huxley was host and the meeting was held at the Machinery Club, 50 Church Street. A press Canfield Coddington Cushing Cuttor Carding. Street. Ames, Canfield, Coddington, Cushing, Cutter, Gardiner, Huxley, Moore, Schmitz, Thomas and Wiggin were there. Moore was the after-dinner speaker — also before and during — and politics naturally was the subject. There were many spirited interpellations. Several momentous decisions on political questions were made during the meeting.

1896

Charles E. Locke, Secretary, M. I. T., Cambridge, Mass. J. Arnold Rockwell, Assistant Secretary, 24 Garden St., Cambridge, Mass.

This being an anniversary number, a glance back to the first issue of the Review twenty-five years ago recalls some of the activities of '96 at that time. Frank Guptill was then Secretary and his class notes of that issue dealt with the military activities of various members of the class, including Mort Sears, Charlie Morris, Joe Hewett, Walter Stearns, Frank Guptill and Francis Conant, all of whom were then occupying active

and Francis Conant, all of whom were then occupying active military jobs. Considerable space was devoted to Butler Ames, who had been prominent in the Spanish War. This issue also reported the death of Billy Keith and gave his biography. Keith was one of our early losses by death.

The Secretary had hoped to receive from Charlie Hyde a report of his experience in the Berkeley fire, but, although a request for this was sent to Hyde some time ago, he has not yet replied. The assumption is that he has been very busy with reconstruction, but it is hoped that a reply will be forthcoming from him in time for the next issue.

In regard to the Class Book, there are still some delinquents who have not filled in their questionnaires and, accordingly, a further request has been mailed to these delinquents. It is hoped that the response will be prompt so that the book can be carried forward to completion without further delay.

be carried forward to completion without further delay.

Report from our old classmate, William C. Mason, who has followed the stage ever since he left Technology and has been

associated with the Copley, St. James, and other theatres, is that he now is devoted entirely to coaching amateur plays.

John E. Lonngren called upon the Secretary on November first and reported that he had completed his trip around the world after having finished the erection of a steel wire mill at Calcutta for an Indian company. He traveled home by the regular route, stopping at Rangoon, Penang, Shanghai, Hongkong, Kobe, Yokohama, and Honolulu. He was suffering with fever when he left India, but a few days on the ocean cured this entirely. He and Mrs. Longren were very fortunate on their trip as they chased one typhoon and were followed by another, but escaped both, and in Japan they were just one week ahead of the earthquake and fire. Another piece of good fortune was a clear day at Honolulu so that it was possible to get a wonderful view of the mountain scenery which so many tourists with a limited stay have failed to obtain on account of cloudly weather. Lonngren has added considerably to his avoirdupois, but otherwise has remained practically unchanged, possessing all of his original hair, ruddy complexion and happy good nature. He has been spending some time around Boston, but was off for Chicago at last accounts to see what is going to be his next job. His work has never kept him long in one place so that he has never had an opportunity to settle down and now appears to have acquired the habit of being on the move and finds that a vacation is rather irksome and he is itching to be back on the job again. A survey of the rod and wire mills of the country shows that several of the more recent mills and most successful mills have been constructed by Lonngren.

Enddie Welker steamed leave groups in his travels to write

Freddie Walker stopped long enough in his travels to write the Secretary a note from Cincinnati and to report that he was

looking up '96 fellows in that city.

George Hewins finds every minute of his time occupied with the construction of the Davis Bridge project by his company. This is located on the Deerfield River in southern Vermont and when completed for power plant will consist of an earth dam, diversion tunnel, spillway, reservoir, pressure tunnel, surge tank and penstocks, power house and transmission line. The engineers and contractors for the entire project are the Power Construction Company of Worcester, of which Hewins is President. The dam is 200 feet high, 1300 feet wide at the base, 25 feet wide at the crest, and contains 1,900,000 cubic yards of earth which is the highest earth dam in the world built by the

BARTON & ELLIS COMPANY

INSURANCE

We are particularly qualified to serve manufacturing and mercantile establishments and have many of New England's prominent corporations of this class as satisfied customers.

> 19 PEARL STREET BOSTON, MASS.

modified hydraulic fill method. It was completed on December first. The diversion tunnel was 22½ feet diameter, concrete lined, and 1500 feet long, and was completed in September, 1922, to carry away the water during the construction of the dam. The spillway is unique in design, of a shape of a morning glory blossom. It is 500 feet long and has a capacity of 30,000 cubic feet per second. Its construction involved 30,000 cubic yards of rock excavation and 5,000 cubic yards of concrete. The reservoir formed by the dam will be 10 miles long and cover an area of 3½ square miles. Eight miles of railroad had to be an area of 3½ square miles. Eight miles of railroad had to be relocated, 14 miles of highway discontinued, 4 miles of new highway constructed, three cemeteries relocated, and various buildings moved. Its capacity is 38,000,000,000 gallons. The pressure tunnel is 2½ miles long and 14 feet in diameter and has a normal capacity of 1400 cubic feet per second. Excavation was finished in November. The lining will be completed next April. The surge tank is 184 feet high and 34 feet diameter. The penstocks weigh 350 tons each and are 9 feet in diameter. The power house is to contain three units, each of 20,000 H. P., operating under a maximum head of 390 feet or a minimum head of 300 feet. The generating voltage is 6600 volts and the transmission voltage is 110,000 volts. This power is to be distributed to various centers for power and lighting. The number of men employed in August, 1923, was 1500; the estimated total cost, including transmission line, was \$10,000,000. The work has attracted much attention and numerous visitors. Hewins reports that on Sundays two or three thousand auto-Hewins reports that on Sundays two or three thousand automobiles appear. It is expected that the plant will be in operation

by next April.

Walter Stearns has been recently made assistant manager of the Central Station Department of the General Electric Company at Schenectady.

Sjöstrom reports that he has been back in New England for some time. His work since graduation has been largely around Toronto, where he was very successful in handling various cotton and woolen mill machinery. For family reasons, however, it was desirable that he reside in New England and he, therefore, accepted the position as representative for New England of Walker & Davis, Inc., a concern which builds textile machinery but specializes in dyeing machinery, which latter has been Sjöstrom's own specialty. He now has the entire sales managership of this concern, which has its head office in Philamanagership of this concern, which has its head office in Filmadelphia, but Sjöstrom maintains his home at 2 Arlington Street, Methuen, Mass., where he will be delighted to receive a call from any '96 man who may be in that vicinity. One of his boys is in the printing business and the other is following the textile business at the New Shawsheen mill and is taking courses in the Lowell Textile School under Barker. Sjöstrom hopes to line up for Technology his youngest son who is now twelve years line up for Technology his youngest son who is now twelve years

of age.
Walter Leland reports his safe arrival back in San Francisco
Walter Leland reports his safe arrival back in San Francisco and states that although he was away five weeks, every minute was full and he did not run across any '96 men and cannot tell much about the San Francisco bunch except that they are all

plugging along on their respective jobs.

1897

JOHN A. COLLINS, JR., Secretary, 20 Quincy St., Lawrence, Mass. Charles W. Bradlee, Acting Secretary, 53 State St., Boston, Mass.

Charles B. Breed has again broken into the limelight, this time in Virginia where his advice has been asked on the best method of financing state highway improvements. Massachusetts might well do likewise.

Our classmate, R. G. Hall, has been busy in the western part of the country since college days. Once we had the pleasure

part of the country since college days. Once we had the pleasure of seeing him and now we learn that he has opened an office at 835 Hyde Street, San Francisco, Calif., as a metallurgical and chemical engineer, specializing in the treatment of complex ores and electrolysis. Good luck to him.

Wilfred Bancroft has been ill, but is now well. He and Jack Illsley swam through the Harvard-Yale game together.

Arthur Hopkins' firm is doing extensive appraisal work in tax cases: the Amoskeag Mills at Manchester, the Sullivan Machine Works at Claremont and several Fall River mills. He is also Treasurer of the Wilcox Comb Co., Inc., at Keene, N. H., where he is spending a couple of days each week. Charles Currier is handling securities of this company.

The biggest item of class news is the announcement of Charles Bradlee's engagement to Miss Agnes Moller of Cambridge. Now we can have the ladies present at class outings. Our heartiest congratulations and best wishes to the faithful

Our heartiest congratulations and best wishes to the faithful

Chairman of our Executive Committee.

NEAR the Institute, at Kendall Square, Technology graduates find a bank in which all of them may feel at home, whatever the nature or the size of their banking business.



Manufacturers National Bank

KENDALL SQUARE, CAMBRIDGE

1898

ARTHUR A. BLANCHARD, Secretary, M. I. T., Cambridge, Mass.

Twenty-five years ago appeared the first issue of The Technology Review and in that issue are class notes of '98 written by C.-E. A. Winslow. At that period, January, 1899, we were beginning independent life and it is with great interest that we compare those beginnings with the later successes.

George Wadsworth, then with New York Central Railroad, is now Consulting Engineer, and in the mention has been

is now Consulting Engineer, and in the meantime has been Automobile Engineer, City Planning Engineer, and Airplane Engineer during the War.

D. L. Wing, then in lumber business in Michigan, is now a

government economist at Washington.

Ed Chapin, then making a study of the Chemistry of wool fats for a Boston firm, has since been in dyestuff business and is now in France taking care of American dyestuff interests.

S. F. Jones, then studying medicine in New York, is now a

noted surgeon in Denver, Colorado, and during the War, was a Major in Medical Service.

E. N. Curtis, then studying law at Boston University and doing a little in the political line, is now a member of a noted law firm in New York and author of "Manual of the Sherman"

R. H. Danforth, then with General Electric Company at Lynn, is now Professor at Case School of Applied Science at

J. N. Goddard, then with Pueblo Smelting and Refining Company, is now Superintendent of Smelter at Torreon, Mexico. Edmond C. Little, then with Professor Homer, is now an architect in St. Louis.

W. B. Wood, then had just announced his engagement to be married. He is now Chief Engineer of Joseph Bancroft & Sons Company, Wilmington, and has two children.

Bob Allyn was then studying patent law at Washington. He is now a celebrated patent attorney, an alderman in New York, and fills a large number of honorary and public service offices.

Assistants at the Institute at that time were A. A. Blanchard, J. G. Coffin, A. I. Franklin, A. H. Jacoby, C. S. Koch, J. C. Riley, E. W. Rutherford, L. J. Seidensticker, and M. deK. Thompson. Of these, Riley, Thompson, Blanchard are still on the Institute Faculty. Coffin is Research Physicist Engineer for

the U. S. Rubber-Company. Franklin is manager of S. M. Bixby & Company, Inc., manufacturers of shoe polishes, etc. Jacoby has been in dyestuff business until recently, when he retired to a farm in Ashby, Mass., where he is a country gentleman and is already a local political leader. He has a son at Amherst Agricultural College and a second son, a Freshman at Tech. Koch is President of a steel company in Pennsylvania Rutherford is Vice-President of The Shoe Hardware Company of Waterbury, Conn. Seidensticker is Vice-President of the Atlantic Sugar Refineries, Ltd., Montreal.

Then J. S. Bleeker, D. W. Edgerly, Gorham P. Stevens, E. A. Weiner, and C.-E. A. Winslow were taking graduate work at the Institute. Now Bleeker is Vice-President and Manager of various traction companies in Ohio. Edgerly is an influential

various traction companies in Ohio. Edgerly is an influential power in the paint business and about half a dozen allied industries. Gorham P. Stevens is Director of the American Academy at Rome, and as was mentioned recently in these columns, received an honorary Master of Arts from Harvard last June. Weimer, as we well know, has achieved distinction and performed public service in Lebanon, Pa. Winslow is now Professor of Public Health, Yale Medical School.

A. A. Packard, then with the Herreshoffs at Bristol, R. I., is now Instructor in Physics at Syracuse University.
C. H. Pease, then in the drafting department of Brooklyn Navy Yard, is now owner of Monadnock Blanket Mills, Marlboro,

E. F. Russ, with Baeder Adamson Company (Glue), is now
 President of E. F. Russ Company, Glues and Hide Cuttings.
 E. Sturtevant, then teaching in private school at Newport,

is still teaching at the same place.

The engagement of J. H. Lambert and Mabel Forrest, both '98, was announced in the first issue. At present, they are in Lowell, Mass., where Lambert is a surgeon. They report five children and they have both performed extensive service during the War and public service in their home town.

The following men were then reported to have served in the

Spanish American War:

V. R. Lansingh was a private. His World War record, his achievements and his election to the Tech Corporation are well known. W. R. Strickland was an Ensign. He is now Engineer,

Cadillac Motor Co.

E. M. Taylor was a 2nd Lieutenant. We have not heard from him for a long time.

H. D. Osgood was a private in cavalry. During the World War he was Captain E. R. C., now farmer and contractor, Stephentown, N.

F. M. Kendall was a Sergeant. He is now a Boston architect. H. Snelling was a Corporal. During the World War he was 2nd Lieutenant Q. M. C.; now a farmer in South Carolina.

E. R. Springer was Captain Fifth Mass. Volunteers. unfortunately is a poor hand at sending information about himself but we know that he is chief, or whatever the title is,

of the Boston Transit Commission.

In 1899, the following men constituted the '98 Tech Club in Chicago: H. L. Cobb, R. S. de Golyer, L. D. Gardner, P. McJunkin, W. A. Marshall, H. E. Sargent, A. R. Shedd, T. E. Tallmadge, R. S. Willis and W. G. Zimmerman. Today, only Cobb, de Golyer, Tallmadge are at Chicago. Gardner is President of a publishing house in New York and a member of the Technology Corporation. McJunkin is Manager of the Greensboro Mining Company in North Carolina. Marshall likewise is in the mining business in Nevada. Homer Sargent is retired from active business and lives in Pasadena, Calif. Shedd is a Consulting Engineer in Washington. Willis is Vice-President of the U. S. Rubber Company in New York and Zimmerman is

Manager of the American Bridge Company in Duluth.

The foregoing comparative statistics, chosen almost at random from the class, show, what we all know, that not all of us follow for long the specific line for which we trained, but that the training leads to success when cleaning leads to success when the class is the success when the class is the class of the class is the class of the class of the class is the class of that the training leads to success when circumstances divert

our efforts into other directions.

Following, we will record various bits of information that have come in since the publication of the Twenty-fifth Anniversary Book.

B. H. Johnson reports a little advance in business and one

more member in his family.

George Treat: residence, 26 Ash Street, Braintree, Vice-President, E. H. Rollins & Sons, Bankers; Director, N. E. Oil Refining Company, Wickwire Spencer Steel Company, Eastern Mfg. Company, Livermore Falls (Maine) Trust and Banking Company.
R. E. Wilder has moved from Johnstown, Pa., to 654 High-

land Avenue, Bethlehem, Pa.

T. E. Tallmadge has been made a Fellow of the American Institute of Architects.

Mark E. Taylor has moved from Washington to 35 Welling-

ton Street, Springfield, Mass.
Charles F. Purinton is member and past President of Vermont Society of Engineers.

Gertrude Bigelow is spending the year September, 1923 to June, 1924 as Director of the Colegio Internacional Sarria at

Barcelona, Spain.

Fred B. Dawes is a member of the Society of American Military Engineers, the Unitarian Laymen's League and Hudson

(Mass.) Board of Trade.
Robert M. Draper is now Assistant Superintendent of the Mammoth Smelter of the U. S. Smelting Company in Kennett,

Babson and Peavey have recently been made directors of the Boston and Worcester Street Railway. Roger Babson has written a new book entitled, "What is Success?"

J. F. Sickman has gone from New York to Ontonagon, Michigan, care of Ontonagon Fiber Company. Paul F. Johnson is associate-member of the Institute of Radio Engineers.

R. C. Faught has moved from Forest Park, Md., to Aqua Vista, Athol Gate, Catonsville, Md.

A. R. Shedd's present address is 1849 Monroe Street, N. W. Washington, D. C. Shedd reports one child.

One of our classmates, a college President, comments as

"I want to congratulate you on this class book. It is extremely interesting and full of valuable information. I am impressed with the small number of children which have been born to the members of the Class of '98. It is sad to see a group of men of this type so poorly represented in the next generation."

J. F. Muhlig is General Manager of the Industrial Service Corporation of Virginia, Hopewell, Va.

Frank L. Richardson was President of the Boston Society of Anæsthetists 1922–23 and is now President of the Eastern Society of Anæsthetists.

Recently Ernest Russ presented to Elliott Barker and to the Class Secretary each a handsome pair of gold cuff links in the name of the men who went to the Twenty-fifth Reunion last June in appreciation of the work they did in organizing the reunion. Both Barker and Blanchard hereby express their pleasure and gratitude at this mark of esteem from their classmates. The latter is willing to admit that there is a lot of work in arranging a class reunion because it was Barker who took the responsibility as Chairman of the Committee and did the major part of the work.

Percival H. Lombard owns a ranch on Cape Cod and he is President of the Bourne Historical Society. He has recently indulged in an interesting bit of historical research with reference to the old Pilgrim-Dutch Trading Post on Cape Cod, the site of which has been located and through Lombard's efforts bought and made a public park for the town of Bourne. We reprint the final paragraph from his address on the subject:

"To Foster Patriotism.

I hope you will agree with me that the Trading Post is of sufficient importance to warrant the interest that we have taken in it. Year after year more people are coming from all over the country to the Cape for summer vacations and to show to their children this land which is so rich in the early history of our great nation. More and more shipping, as the years go by, will pass through the canal. From it, the Trading Post marker will be seen and the Bourne Historical Society takes this opportunity to do its share in fostering and preserving the spirit of patriotism—of honoring the Colonial spirit."

Charlie Winslow was a prominent figure at the Boston Health Show and the meetings of the American Public Health Association, held in Boston in October. We noted a life-size picture and several columns from his pen in the Transcript for

October 6.

In a recent issue of *The Tech* under the heading of Tech Men in the Telephone Industry, we noted Karl Waterson's name as follows:

"K. W. Waterson, '98, the Assistant Chief Engineer of the American Telephone & Telegraph Company, has been the directing genius behind the Traffic Engineering work of the system involving the handling of 35,000,000,000 telephone connections a day.'

Seth Humphrey spent July in the Samoan Islands, August in the Friendly Islands, and September in the Fiji Islands. He planned to be in Australia in October and to get to Hongkong and Japan by spring.



Russell & airfield INSURANCE 2

NINETY NINE - MILK STREET - BOSTON

ESTABROOK & CO.

SOUND INVESTMENT SECURITIES

15 State Street Boston

24 Broad Street New York

HARTFORD

SPRINGFIELD

PROVIDENCE

NEW BEDFORD

GEORGE CROCKER GIBBS, Secretary, 25 South Street, New York, N. Y. No notes received from the Secretary.

Allan W. Rowe, Secretary, 295 Commonwealth Ave., Boston, Mass.

Arthur Ray, who was a special in the Class of '01, is here in Arthur Ray, who was a special in the class of vi, is liefe in Boston and is connected with the Massachusetts Normal Art School. His statement of his own activities is limited, which your Secretary regrets. He does, however, give a very interesting statement concerning some of the work of Bittenger. We

quote it verbatim:
"It was a very pleasant surprise to have Mr. Bittenger
his discoveries in camouflaging color demonstrate and lecture on his discoveries in camouflaging color at our school. I had not seen or heard of him since '01. By

at our school. I had not seen or heard of him since 01. By looking through a special glass you saw an entirely different picture from the one which you saw without the glass. The invention may be very valuable in war times."

Charlie Campbell is now with the Detroit League for the Handicapped. Charlie's work since leaving Technology has been the reclamation of human flotsam and his efforts have been attended with a very great success. As some of the class may know, he has been in Massachusetts, Maryland, and in several of the middle western States. The service which he is rendering to the unfortunates whose vision has been destroyed cannot be measured in words. I quote certain paragraphs from the

letter as of general interest to the class:
"Personally, I shall remember Dr. Stratton's visit as long as I live. I was privileged to go with a group of ten Tech men with him on a tour of inspection to Henry Ford's new \$55,000,000 plant at River Rouge. We were personally conducted over the place by Mr. Ford's head men and for several hours our party revelled in an intimate inside view of one of the wonder works of the world. At an appropriate time, we filed into Mr. Ford's office and Dr. Stratton and he carried on in our presence an animated and interesting discussion. Dr. Stratton indicated that what Mr. Ford had succeeded in doing to such a remarkable extent with materials, he hoped to accomplish with men. This appeared to appeal strongly to Mr. Ford who, after all, has won his place in the world not only by his successful handling of materials, but also the men who have worked these materials into the world-renowned flivvers. Every man who stood in the humbly furnished, unassuming office and saw those two interesting men chatting across the inexpensive desk will long remember the occasion.

I quote also a brief résumé of his later activities as being

most informative to the members of the class.

"For three and a half years every man who came back from France with his eyes injured as a result of the World War, passed through my hands. Some day I might write a brief sketch of this interesting attempt at rehabilitation. There are many interesting photographs from which you might select one or

two that would bear reproduction.

"The other phase of work to which I refer is the one with which I am now connected: So far as I know, Detroit is the first city in the country which has attempted to consolidate its efforts in behalf of the handicapped of all types. In most cities you have separate agencies for the blind and other agencies for the crippled, etc. Here in Detroit, through the instrumentality of the Community Fund (commonly known as Community Chest) these efforts are coördinated and managed by one agency. It has been my privilege for the past year and a half to direct this interesting effort to salvage presumably wrecked humanity." Willard Dow writes that he is engaged in Financial Investi-gations, Constructive Accounting and Costs. This information

tends to explain to your Secretary the genesis of Willard's acid comment on his own modest financial statement. I think myself it was pretty rotten but after all, like the rest of man-kind, I am hampered by my limitations.

In view of this confession of impecuniosity it is timely and seasonable to quote Charlie Tufts' message of the Semet-Solvay Company in Syracuse, New York, who states concisely: "No change." How well your Secretary appreciates the poignancy of this brief statement.

Hal Wood who is now at Nutley, New Jersey — an environmental reaction — says that he pays his dues once every three years with clock-like regularity. As a matter of fact, he understates his philanthropy. He also wants me to apologize to Greta Gray for some reason which is not entirely clear from his somewhat illegible chirography. I gladly comply with his request.

John Brownell is now in New York with the Equitable Life Assurance Society, his specific activity being that of Safety Engineer in the Group Service Department. I quote him at

Nothing much about myself - plugging away at 'Old Man Carelessness' to the end that industrial accidental injuries may be lessened or eliminated. I am on several committees working out safety standards under guidance of the Standard-izing Committee of the Engineering Societies. I am Secretary of the Statistics Committee of the Public Safety Section of the National Safety Council. I travel a great deal, having visited National Safety Council. I travel a great deal, having visited during past year, among other places, the following cities: Chicago, Milwaukee, St. Louis, Omaha, Kansas City, Oklahoma City (Shidler, Okla., the Burbank Oil Fields), Detroit, Niagara Falls, Buffalo, Cleveland, Indianapolis, Cincinnati, Louisville, Memphis, New Orleans, Mobile, Jacksonville and Tampa, Fla., Atlanta, Birmingham, Ala., Boston, Providence, etc. Played tennis at New Orleans and Jacksonville last March and twice in mid winter on the covered court at Providence. and twice in mid-winter on the covered court at Providence. Also had the pleasure of playing chess at the famous New Orleans Chess, Checker and Whist Club (Paul Morphy's old stamping ground).

"I have four children, the oldest a boy (20) now in Columbia University, the youngest (8) also of sterner sex, in second year primary. The other two are a daughter (19) and a son (17)."

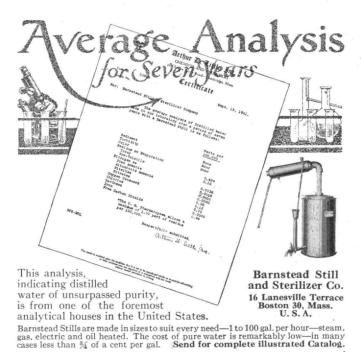
John Alden Trott is Sales Manager of the Frary Metal Division of the United Lead Company. This product is a hard lead bearing metal for railroads and industrial plants. John states that there is no excitement whatever and that his hobby is radio — which would seem to your Secretary an inversion of the usual sequence of cause and effect. The second statement,

however, may possibly be a veiled apology.

Freddie Freeman writes from Portland, Maine (where he is General Manager of the Windham Manufacturing Company), that there is an excellent 18-hole golf course there—if it be the one at Falmouth Foreside, your Secretary will add his confirmation—and he invites all members of the Class of '01 to engage him in battle in a Scotch foursome. Charlie Record's

name is particularly mentioned as a desired competitor.

Ralph Stearns, one of the writer's efficient predecessors, is now settled in New York. I quote him at length. Please note





the telephone number and use it when passing through New York.

"With Sanderson & Porter. Designing and reporting on hydro-electric power projects largely in New York, Maryland, and West Virginia. The members of the firm control, as officers, over \$200,000,000 of properties — mainly utilities. These properties have been rapidly expanding.

"I have bought a permanent home here in Bronxville.

Tred Clapp '01 has a fine home not a half mile away. The fine

Fred Clapp, '01, has a fine home not a half mile away. The fine country round about and the quiet nights do a lot to palliate the curse of the metropolis. It is hard to gather any enthusiasm even for the Tech Club in the city, once one gets into these suburban communities. Other than that I am enjoying my present estate and shall be mighty glad to have any '01 man ring me up at Hanover 5640 in the city."

1902

Frederick H. Hunter, Secretary, Box 11, West Roxbury, Mass. Burton G. Philbrick, Assistant Secretary, 276 Stuart St., Boston, Mass.

Since the last notes went to press we have heard directly from Paul Weeks. He has come East to act as Automotive Engineer for the Government at the Aberdeen Proving Grounds. A testing laboratory and field courses are to be developed there to study the various pieces of ordnance moving by gasoline power. Weeks has been for some years engineer with the Holt Manufacturing Company, Stockton, Calif., and probably knows as much about Caterpillar Tractors as any man living.—Charlie Tolman has hung out his shingle as a Consulting Engineer, as shown by the following clipping from the Journal of Industrial and Engineering Chemistry: "Charles P. Tolman has resigned as Chief Engineer of the Manufacturing Committee of the National Lead Company, a position he has held for the past sixteen years, and is now engaged in consulting work. He has been retained as Consulting Engineer for the National Lead Company and expects to specialize in dust and fume control, handling materials and products, manufacturing methods and processes. —William Barber has moved his architectural office to 1123 Story Building, Los Angeles, Calif.—Claude Patch has been in Detroit for some weeks on business for the Morton C. -Luke Collier recently returned from a trip to Pittsburg and Dayton. He reports seeing Harry Canby in the latter place.—McKechnie reports that Bert Lindsly arrived in Franklin, N. J., recently looking over his plant from the insurance point of view.—Les Millar has severed his connection with the Steel & Tube Company of America, and for the present he can be reached at 510 Washington Avenue, Wilmette, Ill.—Baldwin's son, Bill, is a first-class radio operator with Government license, and has spent the past two summer vacations from the White Plains, N. Y. High School as a relief operator on Trans-Atlantic steamers, one summer on the Norwegian Line and one on the Swedish. In addition to his own importing business, Baldwin is Vice-President of the H. W. French Company, dealers in crude rubber at 347 Madison Avenue, New York, N. Y.

This issue of the Review will be out too late to announce the class dinner held in Boston early in December. It will be out in time, however, to remind classmates of the annual dinner of the Alumni Association at Cambridge on Saturday, January There is always a good bunch of '02 men on hand for this affair. Let's make it an extra large crowd this year.

1904

HENRY W. STEVENS, Secretary, 12 Garrison St., Chestnut Hill, Mass.

Amasa M. Holcombe, Assistant Secretary, 3305 18th St., N. W., Washington, D. C.

It is the sincere hope of the Secretary that all his classmates have had a very Merry Christmas, and that the New Year now stretching before them may prove to be a very happy and prosperous one for them.

It has been a recognized custom for many, many years, at this season, to make resolutions governing one's conduct during the coming year. The Secretary does not know how many of the coming year. The Secretary does not know how many of the class follow this custom to any extent. He would recommend that each reader of these notes make one resolution for the year 1924. It is a resolution that will call for a financial outlay of two cents (\$.02); the muscular exertion of wiggling the fingers slightly; and the exposure to brain fag for a period of perhaps fifteen minutes

Before reaching this point in the notes, the brighter and more acute readers have solved the riddle. The Secretary is actually proposing that they make a resolution to write him a

The above solution is correct. To the first reader who proves that he solved it correctly by writing such a letter, the Secretary will award a suitable prize. The prize-winning letter,

together with an account of the presentation of the prize, will

be published in a future issue of the Review.

While plans for the coming Twentieth Reunion are still in the formative stage, the Secretary will be very glad to receive any suggestions from his classmates regarding ideas for the reunion, which will be held at the Wianno Club, Wianno, Mass., probably on June 20, 21 and 22, 1924, although these dates have not yet been definitely selected.

These notes may not be very extensive, but they should provide food for thought on the part of the readers, and will at least prevent the appearance of that statement, by the Editors, so disappointing to all, "No Notes Received from the Secretary."

Roswell Davis, Secretary, 19 Thorndike St., Beverly, Mass. S. T. STRICKLAND, Assistant Secretary, 26 Pemberton Sq., Boston, Mass.

A most interesting letter dated at Lebong Tandai, Benkoelen, Sumatra, explains our difficulties in locating Hallet

Robbins. He writes:

Ever since graduation, the two 'H. R.'s' in 1905, Gabriel and myself, have been engaged in a sort of informal travel contest, to see which might cover the most miles and visit the most countries. I believe, however, that at the present moment I am ahead. I left New York on my present trip on October 6, and sailed from Vancouver for Auckland on October 20. I spent about two weeks in New Zealand on business, and visited the famous thermal district at Rotorua, but the geysers were on strike the day I was there. New Zealand is an attractive country in summer, but I cannot recommend it in winter, having been there in both seasons. The railroads are all 3' 6" gauge, no dining cars, no steam heat, and children's size sleeping cars between Auckland and Wellington only.

"I spent several months in Australia, most of which time I was in Kalgoorlie, the center of the gold-mining district in Western Australia. It is an unusually substantial city for a mining camp. It is in the bush country and all the waster used by the mills and for demostic country and all the waster used by the mills and for domestic purposes is pumped 350 miles from Mundaring, Weir, near Perth, and in summer, arrives scalding hot. Although Kalgoorlie is in the desert, there is a good deal of green to be seen about the place, as the pepper

trees can live on very little moisture.

"I also visited several other places in Australia, including all of the five capital cities, which meet with my approval in the following order: Melbourne, Sydney, Brisbane, Perth and Adelaide. The hotels in both Australia and New Zealand are Adelaide. The hotels in both Australia and New Zealand are fairly good in the large cities, but exceedingly poor in the smaller places. Even in a place as important as Kalgoorlie there is no hotel I would stay at, so I rented a furnished house and kept house for myself while I was there. I thought of the contrast with Tonopah, a less attractive town, but with a decent hotel. "Outside of the State of Victoria, the Australian railroads leave much to be desired. Each state owns and operates the railroad lines in its territory, but the Commonwealth Govern-

railroad lines in its territory, but the Commonwealth Government operates a line connecting the South Australian lines at ment operates a line connecting the South Australian lines at Port Augusta with the Western Australian lines at Kalgoorlie. The Commonwealth line is about 1200 miles long, and does not cross a single stream of water. It has one tangent three hundred miles long, supposed to be the longest in the world. The equipment is very good, but the service, especially the dining cars, is very poor. In order to cross the Australian continent from Sydney to Perth, it is necessary to travel in seven different trains, and over three different gauges. There are no dining cars in South Australia. New South Wales or are no dining cars in South Australia, New South Wales or Queensland.

"I found the Australian people almost without exception to be friendly, hospitable and courteous, but the country as a whole is a horrible example of the results of socialism and paternalism. Any advocate of Government ownership of public utilities in the United States ought to take a trip through Australia and New Zealand, and he would return thoroughly

"From Australia I went to Java, where I visited Soerabaja, Pasoeroean, Samarang, Cheribon, Batavia and Buitenzorg, the last-named place being the location of the world-famous Botanical Gardens, which, however, I think are a little disappointing to one who is not a trained botanist, as there is nothing spectacular about them at all. Java, as a whole, is a rich, thriving and interesting country. The Hotel des Indes at Weltevreden, the interesting country. residence district of Batavia, deserves a place among the world's leading hotels.

"The purpose of my present trip is the introduction of Aero Brand cyanide, in place of other brands of cyanide formerly used, for the extraction of gold and silver from their ores. The story of this new cyanide is one of the industrial romances growing out of the war. Although a crude product, it has given



After you've done your best-What then?

YOU who have charge of plant production realize that your first duty is to take the equipment you have and bring production up to the highest possible level.

Let's suppose you've done that. Machines are in good order. Work is properly scheduled. Time studies have been carefully made. Yet costs are still too high.

Then the only solution is to get new machines which can do the work faster at lower power and labor costs.

Such machines as the Brown & Sharpe No. 21 Automatic Milling Machine have done wonders in speeding up production and lowering costs.

Get acquainted with this machine now. Write for this fully illustrated book de-

scribing the machine and several typical jobs on which it has cut costs. Send for your copy today.

BROWN & SHARPE MFG.CO. Providence, R. I., U.S.A.



in many cases distinctly better results than the high-priced

refined cyanide, and is of course cheaper.

"There are five mines using cyanide in Sumatra, and only one in Netherlands India outside of Sumatra. I have already visited two of the Sumatra plants, am now at a third, and have two more on my program. I find the Dutch congenial, friendly, and easy to do business with. They all speak English fluently, as well as Malay, German, French, etc. In fact, the most essential qualification of a mine manager in this part of the world, is a thorough knowledge of all the languages mentioned and Dutch. The labor used in the mines is nearly all contract coolies from Java, who receive the equivalent of about 20c per day, food, lodging, medical attendance, etc. The manager of the mine I am now visiting is reported to receive a salary of \$2000 per month, and presumably he is worth it, as the mine is paying 45% annual dividends. Of the staff, the mine is German, the mill English and the office Dutch. The assorted nationalities seem to get along quite well together.

"The annual rainfall here is 220 inches, much more than any place in the United States, with the possible exception of Cape Flattery or Neah Bay. It usually rains hard in the afternoon, and is too cool for white clothes in the evening, and a

blanket is necessary at night.

"I have not met a single Tech man on my trip thus far. Bob Cutting, who was in South Australia for several years, returned to the States before my arrival in Australia.

"I expect it will be several months before I return, as I have still on my program, Japan, Korea, China, Philippines, Federated Malay States, British India, etc. My permanent address, through which I can be reached at any time, is care of American Cyanamid Company, 511 Fifth Avenue, New York.

Miss Ida Ryan, who has developed an extensive architectural practice in Orlando, Florida, was recently awarded the medal of the Department of Architecture as an expression of its appreciation for the high value of the work that she did for the department as travelling fellow in Europe during the year 1907-08. The late delivery is due to the fact that the medal was only

recently established.

Arthur H. Howland, who was for some time in the office of the state architect, Raleigh, North Carolina, writes: "My retirement from North Carolina a year ago was conducted in good order. I came to New York — or rather returned here — because of relatives and friends. For the time being, I am in the office of James Gamble Rogers but hope eventually to swing a practice of my own." Rather old news, you'll say, but how shall we induce these fellows to keep us posted?

Some others are a little slow, too, for Bill Keen admits that he thought Marcy was still on the job (whose compliment, Grove?) Bill says: "I changed my address early in February of this year when an opening occurred with the Ludlum Steel Co., Watervliet, N. Y. I had been in New York City for nearly three years doing a bit of brokerage in ores and metals, with here and there a job in consulting work. I found the years '21 and '22, however, pretty lean and was ready to get back into regular harness once more in '23. We are making a big variety of steels at Ludlum, including all the usual types of tool steel, and in addition the specialties such as rustless steel and iron and the 'silcrome' valve steels. It is my job to see that the quality is the best and to improve and correct material in process wherever possible. Yes, I sure am planning for the 1925 Reunion. Will be there with bells on unless something very unusual happens to prevent me.'

From Durham, North Carolina, Fred Simonds has returned

to New York and is assistant engineer with Nicholas S. Hill,

Jr., at 112 East 19th Street.

Harry Wentworth, Vice-President of the American Zinc and Lead Smelting and Refining Company, recently addressed the Mining Engineering Society on "Economics of Mining Management." There were free smokes and a large attendance.

Some time ago, Grafton Perkins became Vice-President of
Hewitt, Gannon & Co., Advertising and Merchandising, 52
Vanderbilt Avenue, New York. He writes:

'Our company is a regular advertising agency with a list of about thirty clients whose advertising we prepare and place in various publications. We are not like the average big agency which, if it maintains a technical and trade department at all, does so merely to handle that work for clients who also do general advertising. With us this work stands squarely on its own feet and is in charge of technically trained men who can talk the manufacturers' own language. Even in general advertising, however, I have been most gratified to find how the engineering type of mind fits in. Two of the best men we have are engineering school men and they surely do get to the roots of the standard of a problem and think straight, whether they are faced with the merchandise of roofing, hair nets, real estate or face creams.

On the stationery of Norman Lombard & Co., First National Bank Building, San Francisco, our Sophomore President writes the following letter, just as full of ideas as one would expect:

"Your letter awakened old memories long dormant and almost moribund (this is a term they use at Harvard). It was very good to hear a word of some of the old friends and comforting to learn that only one of them has a steam yacht. That makes me feel in good company. But why should anyone want a steam yacht? I sure am happy without one. I have almost equally expensive assets though, in my five children—three girls and two boys—and they afford much more entertainment

than any mere piece of machinery could possibly do.

"Financially, I am very busy. I curse the income tax collector to establish my credit but otherwise enjoy few of the benefits of the initiative discouraging law under which he thrives.

"I am a reformer still, operating on everything and everybody but myself. I am a fee trader in the belief that only that way shall we get a merchant marine which is necessary to our I agitate in favor of increased inheritance taxes thinking that old Tommy Jefferson ought to have some help in saving his reputation for veracity. But, above all things which I should like to see and the thing which I should gladly give my life to see done, I favor the adoption of a multiple standard of values, something on the order of the Irving Fisher plan. Why, in this age of alleged intelligence, we should have a standard of value which is a unit of weight of a commodity that is of no earthly use to anyone is beyond me.

"The Tech fellows hereabouts get together for a luncheon on the fourth Tuesday in every month at the Engineers' Club. It is a good crowd and we welcome recruits. Since San Francisco is to entertain both of the National Conventions next year,

maybe we shall see more fellows out here.

"I am glad your official duties compelled you to write.
"Give my very best to all the boys. I should dearly love to see them all because the friendships one forms in college are much more real than those formed later, and when they come this way enjoin upon them the imperative duty of making themselves seen and heard.'

We like your letter, Norman, though we cannot agree with all of your ideas. We had supposed, for instance, the lowly condition of our merchant marine at least partly due to a certain

WE HAVE BEEN HELPING OTHERS KEEP THE B. T. U. WHOLLY FOR THE PAST 30 YEARS.

HUNDREDS OF TECHNOLOGY MEN KNOW AND ENDORSE OUR WORK AS OF THE HIGHEST GRADE. MAY WE HAVE THE PLEASURE OF SERVING YOU TOO?

> NIGHTINGALE & CHILDS COMPANY **205 CONGRESS STREET** BOSTON, MASS.

CONTRACTORS FOR ALL KINDS OF HEAT AND COLD INSULATION



THE TEST OF YEARS

Twenty years ago the Dunham Radiator Trap revolutionized old heating principles. It was the first fluid thermostatic trap—sure and economical in operation—good looking and lasting—and immediately successful. Since then, its principle has never changed, nor has it ever been equalled in material, construction, or in its operation by a single imitative device.

With this radiator trap as a gauge of quality, a number of kindred heating specialties have been gradually added to Dunham Heating Service. Today, thousands of buildings which have enjoyed a full measure of comfort thruout the most frigid winters testify to the efficiency of the trap and the dependability of every phase of Dunham Heating.

Keeping pace with the growing preference of architects and engineers for Dunham Service, is an organization with offices in all the metropolitan centers of the United States and Canada. Its members are well versed in the science of heating and equally familiar with its practical application.

C. A. DUNHAM CO., CHICAGO

Boston Branch Sales Office, 136 Federal Street

Telephone, Main 7663

F. D. B. INGALLS, '01, Mgr.

Seamen's Act fostered by a fellow reformer of yours. Fisher's plan for a multiple standard never appealed to us at all. For the benefit of those who failed to keep up their pollycon, we will explain that these fellows propose to abolish gold coin and keep changing the weight of the imaginary gold dollar to agree with an index number prepared by Baron Babson. Perhaps this might keep prices more uniform but would we like to have our dollar bill backed up by an index number in the Treasury? Not at the present price of coal.

Gorham Crosby has made a thorough canvas of the '05 men

Gornam Crosby has made a thorough canvas of the '05 men in New York and vicinity to determine how the men and wives stand in golf and bridge. He has prepared and circulated a list of thirty names together with the information which, no doubt, will help to bring together groups of classmates. Many were surprised to find friends living so near and we hope there will be many good times resulting. Gorham is entitled to thanks for his timely work

for his timely work.

1906

J. W. Kidder, Secretary, 50 Oliver St., Boston Mass.

E. B. Rowe, Assistant Secretary, 108 Water St., Boston, Mass. The class is indebted to the Assistant Secretary for the

following notes: The Boston Herald for October 18 contained the following item: "Dr. John F. Norton, and Dr. Edward I. Jordan of the Department of Hygiene and Bacteriology at the University of Chicago have begun an investigation of the cause of colds, it became known today, and have sent out about 2000 questionnaires to students concerning their chronic conditions, weight of underwear and other points bearing on colds. No single germ ever has been found to be the cause of colds, Dr. Norton said, adding that while numerous germs have been found to be contributory causes, no single one has been found to be domi-

Charlie Mowry takes a well-merited crack in the Engineering News Record for June 21 at the amateurs who think they can improve on factory sprinkler heads by using some household recipes such as had appeared in an earlier issue. Charles states, "There are millions of sprinklers along the Atlantic seaboard which have been exposed to salt air, etc." Besides his regular job as Director of the Factory Mutual Laboratories, we'd like to know whether Charlie is likewise inspector of all Atlantic seaboard exposures. If so, the Secretary and Assistant Secretary

want to speak now for a job as his assistant next summer. Harry Brown was around Boston early this fall visiting his mother, who still lives in Allston, and renewing acquaintances with his old friends. Harry, for the past few years, has been Superintendent of the Michigan Carbon Works, one of the largest properties of the American Agricultural Chemical Company, located in Detroit, but has recently changed to the Postum Cereal Company and is located at Battle Creek. Harry says his work and environment rate about 80% and if the plant were in Eastern Massachusetts it would be 100%. Send the boy back to Tech to put the finishing touches on his engineering training anyway, Harry, then you'll still have an excuse for getting East now and then.

Joe Johnson is still with the American Agricultural Chemical Company, though now in the Manufacturing Department at headquarters in New York. Joe gets over to Boston at every opportunity, but has apparently quit looking for her or else hasn't yet found the right one, for he's still in single harness.

Bryant Nichols, Secretary, 2 Rowe St., Auburndale, Mass. HAROLD S. WONSON, Assistant Secretary,

W. H. McElwain Co., Manchester, N. H.

The only item of class news which has come to the Secretary during the past month is the following letter from H. L. Moody: "Just received my Technology Review for November and under Class Notes I see that I have been discovered. You have the name of the company only approximately correct. I never heard of The U. G. & Contracting Company so I guess I had better set you straight on it.

"As of May 1, 1923, I accepted the position of Sales Manager with The U. G. I. Contracting Company which is an allied company of The United Gas Improvement Company. It is that branch of the organization which carries on the construction work for all of the gas and electric properties owned and controlled by The United Gas Improvement Company and in addition contracts with outside concerns, similar to Stone & Webster, J. G. White, etc. I was with the Westinghouse Com-

pany for nearly fifteen years and was loathe to make this change but know you will be interested to learn that it was under such circumstances and on such a basis that would scarcely

permit my doing anything other than I did.
"I do not know from what source you secured the information. I was perfectly willing to have the news of my change come to you providing it was right and after reading the article decided

to give you the true facts.

1908

Harold L. Carter, Secretary, 185 Franklin St., Boston, Mass. LINCOLN T. MAYO, Treasurer, 181 Massachusetts Ave., Boston, Mass

The first bi-monthly dinner of the fall was held at the Boston City Club on Thursday evening, November 15. The following were present: Langdon Coffin, L. T. Collins, Joseph Pope, Myron Davis, Winch Heath, George Freethy, H. P. Gurney, W. E. Booth, E. E. Kilburn, H. L. Carter, Eber Wells, A. M. Cook,

and Lincoln Mayo

It was decided that in the future these bi-monthly dinners will be held at the Walker Memorial, so make your plans accordingly. The next dinner will be held on Tuesday evening, January 8, 1924, at 6.30 p.m. Several of the fellows who have eaten there recently are enthusiastic about the quality and variety of the food. Incidentally, the price is considerably smaller than we have been paying at the City Club.

Myron Davis got a card a few weeks ago from Harry Bentley who, as you remember, went to Europe soon after the June reunion. The following extract shows that he is enjoying himself: reunion. The following extract shows that he is enjoying.
"Fate has dropped me into a comfortable environment for a month or two. I am sharing a studio apartment with a chap from Chicago for a stay of several months — atelier, bedroom, sitting-room and kitchen. The best thing about it is a nice French madame, who comes in twice a day to give us lunch and dinner. It beats a hotel or pension all hollow. I take a French lesson every morning, sketch out of doors in the afternoon, and go to a life class, theatre, or a concert evenings."

We understand also that Doc Leslie is also abroad on business

for the United Shoe Machinery Company.

This European travel appears to be catching as you will note by the following from J. M. Burch, Jr.: "I rather had

HOUSING COMPANY **ENGINEERS**

Specialists in

RESIDENTIAL CONSTRUCTION

Developers of

GUNSTONE The Modern Way to Build

Contractors for Concrete Forms, Cement Gun Work, Rock Drilling and Masonry Removal.

expected to stop off in Boston for the class dinner the 15th, but Mrs. Burch and I took an earlier boat, so I couldn't make it. We expect to spend about three weeks in Paris and come back on the "Berengaria", which leaves over there on December 12. on the "Berengaria", which leaves over there on December 12. Give my best to all the fellows."

We have a new member of the class who also happens to be

a co-ed. As far as we know she is the youngest member and was born on October 22, 1923, and her name is Virginia Jane Cook. We understand that Alton is more interested in this

than he is in radio.

Tim Collins has recently opened offices at 53 State Street, Boston, specializing in bank, mill, and real estate stocks. Toot Ellis has recently returned from a trip to the Pacific

Coast for Lockwood, Greene & Company and we hope we may have the opportunity of hearing some of his experiences at the next dinner

Eric Manning has also spent several months on the Pacific Coast for the Factory Mutuals. He is planning to return by way of the Canadian Rockies and has promised to bring back

some pictures worth seeing.

The Committee, which means Alton Cook, having charge of the pictures taken at the June reunion, have selected a large number of interesting snapshots and are planning to get these out in album form together with a log. These will soon be available for those who want them. An order blank and description letter will be sent out in the near future.

ORVILLE B. DENISON, Secretary, Room 3–207, M. I. T., Cambridge A, Mass.

JOHN A. HERLIHY, Assistant Secretary, 588 Riverside Ave., Medford, Mass.

Graced by the presence of President Samuel W. Stratton of the Institute and further embellished by the bowling matches which followed, the dinner of the Class of 1911 at the Walker Memorial on the evening of November first was a distinct Twenty-one men attended as follows: S. Bogdasarian, O. S. Clark, M. E. Comstock, Art Coupal, George Cumings, Dennie Denison, Carl Ell, A. L. Gardner, Tommie Haines, Ned Hall, Jack Herlihy, H. G. Jenks, Art Leary, Ted Parker, Carl Richmond, D. J. Smith, O. W. Stewart, Ted Van Tassel, Gordon Wilkes, and Frank Wood.

Dr. Stratton told of his summer in Europe, laying particular emphasis on the splendid state in which technical education now is in England and France and of the wonderful accomplishments of the Germans in maintaining the excellence of their scientific schools, despite the frightful economic conditions. On this side of the Atlantic, Dr. Stratton said, our own country must keep going "full speed ahead" in order to meet the continually increasing demand for well-trained engineers.

Dr. Stratton expressed his hearty approval of the new Executive Secretary idea, believing this to be a wonderful step forward on the part of the Alumni Association. He said that the alumni should not be continually "dunned" for money and that what is more desired now is the continual interest and coöperation of graduates and former students of M. I. T. He was most enthusiastically received.

The earlier portions of the dinner were much enlivened by

the fact that in the next hall the Sophomore class was holding a dinner prior to the annual Field Day and naturally the Freshmen were doing all in their power to "gum the deal." Several pretty rough scrimmages occurred in the hall where our dinner was in progress. Honors seemed pretty even but there was considerable attendant excitement.

After the dinner most of the boys stayed and went downstairs After the differ most of the boys stayed and went downstains to the bowling alleys where two interesting matches were rolled. "Cumings' Cooties" took two out of three points from "Parker's Pets," while "Wood's Wonders" made a clean sweep of their match with "Clark's Colony."

In a recent set of class notes it was announced that Fred

Daniels had been elected a Trustee of Worcester Academy. Since that time he has been made Secretary of the Board. More

power to you, Fred!

O. W. Stewart has rejoined the Associated Factory Mutual Fire Insurance Companies and is at present in charge of their Plan Division, with headquarters in Boston.

Plan Division, with headquarters in Boston.

It still is a real delight to your humble scribe the way he meets and renews acquaintanceship with '11-ers on his trips around the country as Executive Secretary. In November I met F. H. Daniels, J. D. Hassett, and H. L. Robinson in Worcester; M. E. Hayman, J. R. Hugelman, H. S. Lord, R. H. Mather, and Roger M. Spencer in Hartford; Whitford Drake, Chester Dunlap (who for a time was with '11, but who affiliates with 1910), J. S. Gravely, and Edwin Pugsley in New Haven; F. G. Smith and F. M. Stibbs in Waterbury; and C. S. Ashley,

Behind Our Products—

stands the established reputation of the CARPENTER-MORTON COMPANY for delivering satisfactory merchandise.

For over eighty years our products have fulfilled our claims, giving full value for every cent. Our long experience enables us to supply a paint or varnish for every purpose.

We should be glad to send our representative to consult with you and help you at any time.

It will pay you to investigate.

CARPENTER-MORTON COMPANY

77 Sudbury Street, Boston, Mass.

MANUFACTURERS OF

PAINTS :: VARNISHES OF ALL KINDS :: ENAMELS INDUSTRIAL AND ARCHITECTURAL FINISHES

Jr., in New Bedford. In December I know I shall meet a lot

Jr., in New Bedford. In December I know I shall meet a lot of my 1911 friends in my trip through the Middle West.

It is with the utmost grief that I announce at this time the death of Jim Duffy's wife, who early in November was stricken while on a visit with friends in New York City and died before her husband could reach her bedside. A terrible blow, Jim, and you know you have the sincere sympathy of your host of friends

in 1911.

This issue marks the Silver Anniversary of The Technology Review, which first appeared in January, 1899, and I wish to take this opportunity to let the world know how heartily I approve of the wonderful forward strides made by the present editorial board. On all of my trips I hear the most favorable comment on The Review in its present excellent form—how readable it is, what a splendid tone it has, and how proud Tech men should be to contrast it with other alumni publications. Lobbie, Eric, and Tubby—I salute you in the name of the Class of 1911!

F. J. Shepard, Jr., Secretary, 568 E. First St., Boston, 27, Mass. No notes received from the Secretary.

H. B. RICHMOND, Secretary, 62 Tufts St., Arlington, 74, Mass. G. K. Perley, Assistant Secretary, 45 Hill Side Terrace, Belmont, Mass.

Happy New Year! No, you are not going to be urged to start the New Year right by writing to your Secretary. This has been asked for each year, but as it has had no effect it will not be repeated this year — but write just the same. The big resolution this year is to attend the Ten Year Reunion in June. This is going to be an affair well worth waiting ten years for —

even if certain conditions have changed.

The past month has furnished very little in the way of excitement. The Alumni Council held its one hundredth meeting and celebrated the occasion by presenting Walter Humphreys with a gold watch as an appreciation of his long service as Secretary-Treasurer. Art Stubbs and your Secretary represented 1914 at the meeting.

The first of the Boston luncheons for the year was held November 6 at the Boston Tavern. Pat Adams gave a very interesting résumé of the present standing of Aviation. Some

of the data he presented were of real surprise to most of us. Those attending the luncheon were: Corney, Tallman, Blakeley, Atwood, Fay, Johnson, Crocket, Swift, Ober, Ahern, Wilkins,

H. S., Adams and Richmond.

The following announcement has been received: "Mr. and Mrs. David Eugene Bohannon announce the marriage of their Mrs. David Eugene Bohannon announce the marriage of their daughter, Geraldine Adeline, to Mr. Leslie Standish Hall, on Tuesday, the thirtieth of October, nineteen hundred and twenty-three, Berkeley, California." Miss Bohannon is a graduate of the University of California, receiving the degree of A.B. in 1921 and J.D. in 1923. In August of this year she was admitted to the California Bar. Guess we know who is going to settle the arguments in Les' family. But most benedicts soon discover that it does not require a J.D. for that anyway. We are obliging and give them their way at all times. By the way, the number of new benedicts of late is pretty small. To be sure, with 60% of the class gone, the picking is pretty poor, but with a tenyear exposure it is about time the remaining 40% show signs of year exposure it is about time the remaining 40% show signs of domestication.

It was with considerable pleasure that word was received from H. A. Affel announcing the arrival on November first of a daughter, Priscilla May. Affel also has a husky son who has already passed his fourth birthday.

W. S. Hughes is instructing in Physics at Harvard. If Walter talks at his students as effectively as he does about them, be should at least make an impression. According to Hughes.

he should at least make an impression. According to Hughes, the rate of transfer of knowledge from instructor to student can only be expressed by the theory of limits.

Nineteen hundred and fourteen was well represented in the

"Shenandoah" from Lakehurst, N. Y., to Boston, on November twenty. The ship was in charge of two Naval officers, one of which was Commander R. D. Weyerbacher, XIII-A, and the only message dropped in Boston was to Porter Adams.

Frank P. Scully, Secretary, 118 First St., East Cambridge, Mass.

HOWARD C. THOMAS, Assistant Secretary, 100 Floral St., Newton Highlands, Mass.

At the Harvard-Princeton game, the Secretary ran into Henry Leeb, VI. He looks just the same as ever and wanted

to be remembered to all his old friends. He is still in business in New York and will probably be married shortly, his engagement having been announced in the last class notes.

Last week, coming back from New York on the five o'clock train, I met Kaufman, X. He is coming along in great shape and besides his interests in the Archer Strauss Rubber Company in Framingham, he has various other business enterprises with which he is connected. He was just returning from a three-week shooting trip.

One of the most interesting letters ever received by the Secretary is the following from Vincent Sauchelli. It is so good that I have asked him for another one. You can judge for yourself. Writing from 47 W. 43rd Street, The Royalton Apts., New York City, he says:

"You ask for some news. Well, if what I am going to write

"You ask for some news. Well, if what I am going to write will interest any of the fellows in the same way that many items in our class letters have interested me, I'll be satisfied.

"I am in New York City now, this wonderful metropolis. It looks good to me, after my many years of life in the distant country of the Orang Sakai and Orang Malayn. To be more specific, the country of the Malays—in Selangor and Pahang of the Federated Malay States.

"In 1916, thanks to the efforts of Dr. Walker, of the Engineering Chemistry Department, I got in touch with a very large European plantation rubber syndicate and accepted a position from the latter as research chemist in their eastern laboratories. Of course the idea of a trip half-way around the world to do research in the preparation of raw rubber, to reside among people so little known and in a quaint country infested with tigers, cobras, crocodiles, and other attractions of an eastern jungle worked on my imagination. At the time I was with Arthur D. Little, Inc., doing routine analytical work in the old laboratories on Broad Street. My imagination overruled my judgment and with high thoughts and purpose, bidding good-bye to Boston, I made for Singapore and Kuala Lumpur.

'The pleasures, wonders and novelties that I experienced during the trip to my Far East destination were worth everything to me. That there were many sad disillusions to follow means nothing now. The philosophy expressed by Tennyson that it is better to have loved and lost than not to have loved at all, is good. To have been able to experience those thrills, to create wonderful pictures in the imagination, to see so much that was unusual as I journeyed first to New Orleans, then to El Paso and Juarez, next to Los Angeles, San Diego and San Francisco (right at the time of the World's Fair), from San Francisco on up to Vancouver, B. C., where I boarded the Empress of Asia of the splendid Canadian Pacific Line to Hongkong more than repaid all disillusions. All along the route I had stop-over privileges which I fully took advantage of for short side trips. Three wonderful weeks in Japan were then short side trips. Three wonderful weeks in Japan were then enjoyed during which Tokio, Nikko, Yokohama, Kobe, Nagasaki and a number of inland towns, shrines, famous tea houses and Yoshiwaras were visited. I had the advantage of travelling with an experienced leather salesman whose acquaintance was made on board ship; we were cabin mates. He knew his Japan thoroughly and could talk to the Kurumayus or rickshaw pullers and tea house inmates in such a way that he always got what he wanted without being gouged for it. My eyes were quite opened, but this was only a small earnest of what was to come during the course of the next six years. Travelling in Japan was pleasant but not anything like the interest of the trips through Java, Sumatra, Burma and Northern India and the whole extent of the Federated Malay States. From Hongkong the trip to Singapore was pleasant. We stopped off at a few seaports on

the coast of that huge island of Borneo. It was here that I began to get impressions of the life that I was to experience in Selangor, the premier state of the Malay Federation. Singapore is one of those magnificent cities scattered throughout the British Empire which give credit to the force, organization ability of the British. British Colonial policy as exemplified in the Malay Peninsula is masterly, efficient, statesmanlike and highly beneficial to the natives. The honor and prestige of the India Service is a powerful exhibition of what fine traditions of service can accomplish.

"From Singapore I traveled by train to Kuala Lumpur, a

"From Singapore I traveled by train to Kuala Lumpur, a distance of about 250 miles in twelve hours. The train service was excellent and as good as anything that we have in this country. It compares with that from Paris to Marseilles.

"I arrived in Kuala Lumpur, a perfect stranger in a very strange land. I stopped at the Station Hotel and some fine hotel it is. I was bewildered, I expected to be in a small jungle town with crocodiles sunning themselves on the banks of the muddy river, with native huts of split bamboo snuggling behind banana trees and bamboo clusters with native Malays in Sarong and Baju outfit ready to plunge a crooked kris into your heart. The books said so. Some of my traveling companions had so informed me. Instead, here was Kuala Lumpur with a muddy stream but instead of huts of bamboos I saw buildings whose equal I had not yet seen, macadamized roads, fine palatial bungalows surrounded by beautifully kept lawns; a regal magnificence on all sides. I was disappointed. I wanted to see tigers springing out of lallang grass, crocodiles snapping their powerful jaws. Instead of pleasant looking Malays and harmless Chinese I was prepared for bloody pirates. Didn't I have a 38-Colt with me for defensive purposes?

38-Colt with me for defensive purposes?

"Well I was young. As I look back now I laugh at myself. Another surprise greeted me at finding my bungalow a very neat affair surrounded by two acres of choice grounds kept neat by two gardeners and the laboratory was a delight to my eyes—everything that a young chemist could wish for. Contrasted with the old dingy, dusty laboratories on the top floor at 90 Broad Street where Arthur D. Little, Inc., did its fine work, it was almost too good to be true. (Right here I want to pay my tribute to the excellent work that was done by the A. D. Little Staff in that old laboratory and the invention that used to be encouraged to meet new problems. My highly equipped eastern lab couldn't put out one thousandth part of the good works that this lab did. I have not yet seen the new A. D. Little laboratories.)

Little laboratories.)

"My work was connected very intimately with the production of the finest grade of plantation rubber. But before I was out there very long I had to take up soil analysis, do botanical research and carry out experiments on plant physiology and pathology, insect pests and fungi of all descriptions attacked the Hevea brasiliensis rubber tree. This tree imported from Brazil is the source of all the plantation rubber of the world at the present time. It had to become acclimated to its new environment in Asia. The many parasitic and saprophytic fungi of the Malay forests began to attack the tree with consequent damage to the industry amounting to hundreds of dollars. My work was variegated. From chemistry to tree surgery and botany is a long jump. Fortunately, my training at the Massachusetts Agricultural College and study of the Davey Tree Surgery course fortified me to meet any problem with confidence. But my health began to give way after three years hard work and I began to seek relief. This led me to study many methods of the local native practitioners. From tree physiology and pathology I began to investigate my own physiology and pathology. The deeper I delved the more interesting. Finally

CHAUNCY HALL SCHOOL

For the past fifteen years this school has confined its efforts exclusively to preparation of boys for the Institute.

The real test of a school's training is the ability that its product shows after graduation. Although the school is limited to one hundred and twenty-five, last year's record shows that Chauncy Hall had one hundred and fifteen students in the Institute.

This success is due to thorough grounding in entrance requirements and to training in clear reasoning, accurate and concise expression, and concentration. If you desire your boy to have the advantage of this training, write or telephone for an appointment.

Franklin T. Kurt, Principal

553 BOYLSTON STREET, BOSTON, MASS.



THE Raymond-Whitcomb "Independent Service" (at home or Abroad) is designed for those who prefer to travel "without escort." For extended journeys, necessitating the patronage of unfamiliar railroads, steamship lines and hotels; for successful limited vacation periods; for expeditiously "routed" business trips-our "Independent Service" is a real help. We procure in advance all steamship, Pullman and hotel accommodations; we arrange for baggage transfer and automobile hire; we plan side-trips and essential sightseeing excursions-do everything, in fact, to relieve the traveler (before he sets out and en route) of the generally unescapable hours of annoyance over time-tables, at ticket-offices and in discussions with porters and hard-worked clerks. We believe, if you are planning a trip, we can be of infinite assistance.

Raymond & Whitcomb

New York

Philadelphia 225 Fifth Ave. 1338 Walnut St.

Chicago 112 South Dearborn St. Executive Offices, Beacon and Park Streets, Boston

San Francisco 657 Market St.

Los Angeles 458 So. Spring St.



returned to the United States. I found the natives in Asia cared very little for drug medication. The best results in my own case were achieved by the drugless methods of Chinese and Siamese practitioners and one Hindu. It was the latter who most amazed me by his wonderful work throughout the Peninsula. On returning to the U.S.A., I carried out my resolve to pursue the healing art further along the drugless lines initiated in Malay. The Japanese methods of massage and the wonderful system called Katsu (which is like our osteopathy and chiropractic treatments) obtain wonderful results. Today I am myself a practitioner in this great city, spreading happiness and comfort through the lives of afflicted mankind who are so woefully ignorant of some of the fundamental laws of body comfort and

"I could give you many observations and impressions of long

stay and extensive travels in Malaya.

"This letter is long enough as it is. If you wish, I could jot down in another letter sometime some of these intimate experiences and send them to you."

Clive Lacy writes as follows: "The receipt of your 1915 'HELP' postal almost aroused me to action, but the receipt of your engagement announcement last night actually brought me upstairs and put me in front of the typewriter.

"In the first place, heartiest congratulations! I have had my suspicions of you lately and here is the confirmation. Very

best wishes to you both from Mona and me.

"In the second place, that of class news, Guernsey Palmer, Course II, called me up a couple of weeks ago when he was in town for a couple of days, and we had a couple of hours talk with him and his family, including driving them down to the midnight train to New York. He is engaged in sales engineering for Diesel engines in Texas. Outside of the fact that he talks like a native born southerner, and has gained about fifty pounds, no great change. Family comprises wife, Guernsey, Jr., and a baby girl. He wanted to know why you had not started on our Ten-year Reunion arrangements and said he would positively be on hand for same.

The news intimated above is true. Cards have been sent out announcing the engagement of Mary Elizabeth McGowan

and Frank Paul Scully.

About November 20, two hundred and fifty postal cards

were mailed in alphabetical order to the class with the hope that this would stir up action. The results should be greater than noted at present and I trust that there will be an influx of mail for next month's issue.

The suggestion of Guernsey Palmer, II, about getting plans started for the Tenth Reumon, is well worth consideration and if anybody has any remarks that they would care to make or advice as to the personnel of the committee, it would be well to start things moving.

1916

D. N. Barker, Secretary, 14 Marathon St., Arlington, Mass. WILLIAM W. DRUMMEY, Assistant Secretary, 80 Boylston St., Boston, Mass.

There are still several 1916 men in service: Donald McRae at Fort Hayes, Ohio, Walter J. Wolfe, at Fort Shafter, Honolulu, Joseph Warrent Barker, Captain, C. A. C., Beirne S. Bullard, Puget Sound Navy Yard, Washington, Charles McCarthy, Bureau of Aeronautics, Navy Yard, Washington, I. B. McDaniels, Puget Sound Navy Yard, Washington, I. B. McDaniels, Puget Sound Navy Yard, Washington, Light A. Bureau of Aeronautics, Navy Yard, Washington, I. B. Mc-Daniels, Puget Sound Navy Yard, Washington, Lieut. Alexander Martin, Navy Yard, Philadelphia, Pa., Ralph Millis, Captain U. S. A., Alabama, Halbert H. Neilson, Captain, Fort Ethan Allen, Vermont, Ernest L. Patch, Commander, Naval Station, Hawaii, and Charles S. Reed, U. S. A., Fort Sill.

Richard Ahearn is with the Barney Ahlers Construction Co., New York City.—Warren Ames is President of the B. C. Ames Co., Waltham, Mass., and writes that he is so busy plugging away, trying to fill orders, that he has not much time for the social side of life.—Richard Berger is located at Bridgeport, Conn., as head of the Berger Laboratory, manufacturers of

social side of life.—Richard Berger is located at Bridgeport, Conn., as head of the Berger Laboratory, manufacturers of electrical specialties.

A son, William Ralph, was born on March 3, 1923, to Mr. and Mrs. H. H. Burkhardt, Holyoke, Mass.—Francis H. Dillon, Jr., is Investigator in the Registry of Motor Vehicles, Massachusetts Department of Public Works. Sixteeners in Massachusetts had better make note of this, as it may help them after they get into trouble with some of the wonderful cops around Boston.

Howard I. Foster seems to be a very busy man in Detroit.

Howard L. Foster seems to be a very busy man in Detroit. He is Vice-President of the Utility Compressor Co., Treasurer of the New England Mfg. Co., Secretary-Treasurer of the Bay

State Realty Corporation, and Treasurer of the Fostall Realty Co. Not so bad for one man. You will note that he is Treasurer

of three of the concerns; there must be a reason.

Murray G. Graft is Sales Engineer with the Westinghouse Electric & Manufacturing Co., Denver, Colorado.—Harold P. Gray, W. H. Fleming, and John Ingle are working for the Goodyear Tire & Rubber Co., Akron, Ohio.—All Course VI men will be glad to know where H. A. Hands is located. He is with the Westinghouse Electric & Manufacturing Co., Springfield, Mass.-John J. Hickey and Frank S. Holmes are in the meat business in Boston. Hickey deals in beef, lamb and pork, while Holmes

Harvey Jackson is an architect, with an office at 734 Michigan Trust Building, Grand Rapids, Michigan.—Benjamin H. Kersteen is General Manager of the Charlotte Mining Co., and Highway Engineer, State of New Mexico. He states that Daniel Comiskey is with the Highway Commission at Santa Fe, New Mexico.—Kenneth M. McDonald is head of the Drafting and Machine Designing Department, Vocational School, University of Alabama. He is also instructor in Auto Ignition and Electrical Testing Lab., University of Alabama. He calls this a regular university. Wonder what he calls M. I. T.?

university. Wonder what he calls M. I. T.⁵
T. D. Brophy was married on October 10, 1923, to Miss
Jessie Stewart Milligan at Mt. Vernon, N. Y. Brophy was a
Captain of Artillery during the War. He is a member of the
University Clubs of Boston and New York and the Army and Navy Club of Washington. Nelson MacRae was the best man.

At Trinity Church, Newton Center, Mass., on October 20,

Joel J. Connolly writes: "Interstate Sanitary District No. 5 of the U. S. Public Health Service comprises seven states of the Middle West. The duties of the District Engineer are to coöperate with the engineers of the State Boards of Health, especially where problems involve water supplies, sewage disposal, etc., and to prevent the spread of disease by sources of transportation. This work includes the inspection of all water supplies on some five hundred vessels on the Mississippi River and its tributaries." Saturday night must be extra important Saturday night must be extra important in the Middle West.

Here we have some real dope: Saul A. Hoffman exudes, "What is everything? Having undertaken to prove that not only do our eighty elements originate from one single element which



Rubber Insulated Wires-

Including Wires for Buildings, Railway Signal Wires, Telephone Wires, High Voltage Wires, Car Wires.

Special Cables and Cords-

Deck Cable, Stage Cables, Lamp Cords, Elevator Lighting Control and Annunciator Cables. Automobile, Ignition, Starting and Lighting Cables.

BOSTON INSULATED WIRE AND CABLE CO.

Dorchester District BOSTON, MASSACHUSETTS Canadian Factory, Hamilton, Ontario

breaks down as though by emanation, slowly, forming the various elements known to us in Chemistry, but further to prove that even the single element is nothing more or less than a vibratory force trying to free itself so as to be composed of indivisible vibrations of the shortest wave length. This vibration is the Almighty Power of which this entire universe is composed. This vibration is 'Everything.' There was no beginning neither. can there be an ending. Is not this an answer to eternal life?'

On account of sixteen weeks of sickness just drawing to a close, it is imperative that your Assistant Secretary present his resignation. It is with real regret that this is done for the resignation. It is with real regret that this is done for the writing of these notes and the correspondence entailed has been a great pleasure, during the year or so that he has been in office. However, sadly neglected personal affairs demand full time for a long while now and someone else must step into the job.

In connection with the promised directory, the class has been accounted for and three hundred classmates located. The book will be mailed to all who have replied to the questionnaire and its many follow-ups, about December 1, 1923. Write to Barker. Write to Barker. Write to Barker.

RAYMOND S. STEVENS, Secretary, Room 3-205, M. I. T., Cambridge, Mass.

At last! Word concerning John M. DeBell. Johnnie was At last! Word concerning John M. Debut. elected Secretary of the newly reorganized Berkshire County Alumni Association and Dennie wrote this about him. is now listed as a chemical engineer with the General Electric Company here in Pittsfield, Mass., engaged in development work. He resides with his wife and two young sons at 120 Dodge

Bob Marlow is still active in the New York Technology Club. New York last month we telephoned him and found that he had given up business for the day to insure the success of a Hallowe'en Party scheduled for that night and we were asked to join it. Such details as can well be published you may find in the club letter elsewhere in this issue — but we may say that those that joined a small dinner party preceding the main event enjoyed the whole evening. Ros Pfohl as usual complained of dust in his throat but went home reasonably happy. Dix Proctor appeared and explained that he had become established in a meshive business with an office of his own in that either in a machine business with an office of his own in that city.

The proposed new building for the New York Club was

The proposed new building for the New Tork Club was discussed with interest by various groups during the evening, but it still seemed a rosy prospect for the future.

Ken Childs, formerly in the factory insurance game in Boston, has gone into production work with William Carter at Needham, Mass., his home town. Pete Newell is reported to have been married to Miss Ann Christe in July at Pooler. Georgia (near Savannah) and to have included Boston in his honeymoon itinerary. Douglas H. McLellan asks that all communications in the future be sent him at 489 Summer Street,

Boston.

Bill Eddy sent over as "a classnote from a lost soul" this brief word from Gordon Shand. "Shortly after I left the Navy I embarked on a journalistic career and right now I'm writing pungent paragraphs for the New York American." He is living at 204 West 86th Street, New York.

Ray Gauger is in business with his father, A. F. Gauger,

Ray Gauger is in business with his father, A. F. Gauger, who is a prominent St. Paul architect. Such portions of his letter as the Review can print are as follows: "Don't hear much from the East. Was as far as Atlantic City last summer, 1922 and saw Ed Schoeppe, '15. Heard from Frank Carson, IV. I devour the alumni letter for news. I am single, but chaste and with no immediate prospect of asking for a wedding present. Also busy, this year. Have a shiny limousine, Lincoln four sedan." sedan.

P. W. Carr, Secretary, 400 Charles River Road, Cambridge, Mass.

The miscellaneous notes expected to drift in to the mail of the Secretary have not materialized. I sincerely hope that the people who have been acting as Course Secretaries under the regime of Julie Howe will shoot the dope along to me. The only other alternative is to send out the old, antiquated form questionnaire, asking you all your nationality, color, number of young hopefuls with birthday of each, etc. etc. The Alumni Office frequently sends notices of change of address. If these changes are really genuine, there must be some interesting items of class interest lurking somewhere. Inasmuch as the young lady who censors the dope in The Review will not let us publish the list of changes without accompanying facts, you may all readily see that it is up to you to furnish the missing material. First and foremost, don't forget to be at the big dinner, since SIMCORE miss

Ask for Specification No. 2053 for your files





Simcore wires and cables are subjected to voltage tests ranging, according to size, from 331/3 to 100% in excess of underwriters' reguirements; they have a smooth finish, are easy to pull in and can be delivered quickly. Simcore is safe and gives satisfaction.

SIMPLEX WIRE & CABLE Q

201 DEVONSHIRE ST., BOSTON 9

CHICAGO SAN FRANCISCO

the date being January 5, the excuse being to see and meet some of the big men in the country, and the real reason being, that this will furnish a mighty good opportunity for those 1918 men who can possibly make it to get some real, red-blooded activity started in the class and out of it. Some of our prominent members may have a few things to say to us about a class insurance fund as a means of giving the 'Stute a dormitory or a pool, or something of the sort. Other things may come up. You all will want to be there and hear about them first-hand, and help carry the news to those who are prevented from attending. If, in the meantime, anyone has thought of an appropriate subject for discussion, as being of class interest, shoot it in at once, and the necessary arrangements will be made to provide time and place for discussion. Be There!

Bob Van Kirk has Venied, Vidied, and Vamooskied as far as the sunny slopes of California are concerned, and has accepted a position in Chicago with the Protectoseal Company of America. It will be recalled that the Protectoseal is the safety tube which Bob worked on earlier in the year.

Joe Kelley was discovered in Fall River lately selling tires, oil, gasoline, etc., at his own store. Finding the layout at the New England Oil Co. there not quite up to the mark, Joe and a pal embarked in business for themselves, and find business very good. Joe says Frank Travers is still in California raising oranges.

Our President reported bumping into Hans Roessler at his home in Long Beach, California. Hans is now in the Investment

Judging from the amount of publicity, one of the events of approaching national importance is the engagement, recently announced, of Julie Leonard and a Hartford young lady, name not immediately available. Our erstwhile Vice-President is at once tendered the most cordial congratulations of the class. The ranks of the he-men grow thinner, Ken.

Ed Meade is still at the Institute in the Mechanical Department as an instructor.

Rumor reports that Earl Collins still gets his daily exercise and his cigarette money by punishing a mean piano up at the Harvard Union, whilst hungry Harvard students gargle their

soup.
Mr. and Mrs. Bill Wilson of Lowell chaperoned a house-

party at the Phi Beta Epsilon house the week-end of the Harvard-Yale game. Bill is falling away to a ton.

John Janson was recently married in Lawrence to Miss Emma Keilhau, the ceremony and reception taking place at the home of the bride in that city.

Kenneth F. Akers, Secretary, 54 Dwight St., Brookline, Mass.

Dear Gang: The first few days after the last Review came out the mail box at home was pretty full, but the inspiration did not last long, or rather, it did not spread very far. However, signs of life are welcome, if only a gasp, so to speak. Here's the latest!

Carl Leander, our Course XV bright light, announces his engagement to Miss Alice Catherine Gustafson. The next step

A very dainty card brings us the following news: "A son,

A very dainty card brings us the following news: "A son, John Granville Knox, was born on October seventeenth to Mr. and Mrs. Merrill B. Knox." I suppose he'll be playing Merrill's old banjo in a few weeks, with his feet at least!

I was in New Rochelle, N. Y., two weeks ago, and had dinner with L. D. Wilson. L. D. is now the proverbial proud father of a daughter, Emily Louise, who was born on October 30. Maybe she'll be a co-ed at Tech one of these days.

Bob Mitchell the faithful comes through with another latter.

Bob Mitchell, the faithful, comes through with another letter. He is still with The Edison Company in Boston. He says the L Street Power Station is the latest word in such capacity. Here's an interesting thing. Not one pound of coal is handled by hand from there to the automatic stokers. When burned it travels to the ash dumps, and is then loaded mechanically onto trucks and carted away. Gone are the slaving coal heavers in that plant all right!

Flossie Fogler has been in another bad automobile accident. A car crowded the machine Florence was in off the highway, and their machine overturned. One occupant of the car was killed, and Florence was in the hospital the last I heard. has tough luck.

The following is a letter from Ken White which is of interest to all: "That was terrible! I can help you out a bit. I am almost always in touch with a few men.

"William Tibbets Honiss, otherwise Yam, married Miss Dorothy Roberts of Arlington Heights on September 29. His bride was graduated from Wheaton in June and was quite a prominent figure in undergraduate life there. It was one of the best looking weddings I have ever seen. Ralph Cram's Chapel of Saint Anne, set in a garden on the hillside, makes a wonderful setting. Yam's homebrew may be sampled at his new apartment, somewhere off Farmington Avenue in Hartford.

"I may have to write another 1920 obit for Gerry Tattersfield,

for I have on my desk the announcement of his engagement to Miss Doris Elna Nelson, a most delightful native of Gloucester. Gerry is a wool salesman with his father's company and spent

the summer abroad on the job.
"Francis J. McGill writes me that he is with the Walworth Manufacturing Company 'working on the installation of a wage incentive system and things are rolling fine.'

"Talked with Jack Logan over the 'phone Sunday. He is still working for the Pennsylvania Railroad and is stationed in a small town sixty miles west of Harrisburg. I had thought that all was desert west of that city, but Jack says the scenery is very attractive, natural and otherwise.

"Dusty Miller is still with the Three Millers, though at the

present time in the guise of a refrigeration expert.

"Did we have it in once that Bink Carleton lives in New York and works for the Chipman Chemical Engineering Co. in Bound Brook, N. J.? They make insecticides and Binky is thriving on arsenic. He recently received a commission in the

Field Artillery Reserve.

As far as I could see, there was no mention in the Review of the death of Stephen Lee. Steve is probably the most recent of the sons of Technology to give his life for the advancement of scientific knowledge. He was engaged in gasoline engine research at the Bureau of Standards and was burned to death by that terrible explosion late in September. I am not suggesting this for your notes, but rather that you pass it on to the Editor and let him handle it more fully, as I believe the news warrants.

As for myself, I am still with the Lambertville Rubber Co. in charge of waste reduction (which has nothing to do with our daily dozen) and succeeding quite reasonably. Sooner or later we are bound to come back to the old Course XV stuff and make it talk like money saved. I also run the shop paper and the printing office. A shop paper is a wonderful guarantee of popularity. No one dares get in wrong with the Editor and he

WE WILL BACK our First Cost plus Repairs for Ten Years for comparison with any make in the world.



Buff uses the Hardest Bearing Metalswith least coefficiency of friction and secures utmost stability.

The Buff Highway Transit holds its line solid as a rock.

> Send for CATALOG 310

Accuracy plus Strength permits economical field work

Buff & Buff Mfg. Co. Boston 30, Mass., U. S. A.



Branches: 46 Dey St., N. Y. 231 N. Well St., Chicago

retains a vast amount of information which is lots more interesting than that which is published. If we had a little private 1920 newspaper all our own I'd run my week's notes, unexpurgated, as a comic.

"If I can think of anybody I've missed . . . which reminds me that Jud Clark is still in Hopewell, West Virginia, making

radio insulators.

"Hardworking Bibber, Ancien Chef de Travaux d'Ecole Polytechnique de Paris (which makes his calling cards look like time-tables), is with the International General Electric. He is preparing to sell AC generators to the wild natives of South Africa or Chelsea. It might even have been Brooklyn. I've forgotten; some foreign country, anyway."

R. A. St. Laurent, Secretary, 754 Morton St., Mattapan, Mass. CAROLE A. CLARKE, Assistant Secretary, 528 Riverside Drive, New York, N. Y.

There is somewhat of a dearth of red hot notes just now but lots of news has been received during the last few months, so that even if some of it is a trifle ancient by now, we'll risk its

appearance.

"Francis H. Whelan, I, 531 Brook Road, Milton, Mass., has succumbed to Cupid's darts and will saunter forth this coming February — and the reason is one of Brookline's fairest young daughters, Miss Anna M. Rooney. Since Frank took his M. S. he has more or less kept himself under cover, but now we know the truth. For a time, Frank was with the Metropolitan Park Commission, but is now with Stone & Webster. This information has been received from sources considered to be reliable.

F. Scott Carpenter, XV, H. H. Barton & Son Company, Holmesburg, Philadelphia, Pa., started with the Worthington Pump & Machine Corporation, Harrison, N. J., doing production work, time study and rate setting, and when last heard from was with the same company as Plant Engineer engaged in

construction work and maintenance.

Frederick S. Dellenbaugh, Jr., VI, 91 Spooner Road, Chestnut Hill, Mass., although devoid of any resemblances of a long gray beard, is a Professor in the 'Stute's Electrical Engineering Department, and considers this a peaceful occupation. F. S. was prominent on the varsity crew at Columbia some years ago and since joining the 'Stute has done a very great deal to foster that sport.

Henry R. Haines, VI, Power House No. 2, Big Creek, Calif., is an electrician (first class) with the Southern California Edison Company, Big Creek, Calif.

André Deschamps, IX-A, 5 Rue du Curé du Château, Tournai, Belgium, has been studying at the University of Brussels, Belgium, to get his Doctor's degree. He is now in charge of the Foreign and Information Department of the Compagnie Internationale pour le Fabrication Mecanique du Verre (Procedes Libbey Owens) (Libbey Owens Sheet Glass Company, of Toledo, Ohio) 61 Avenue Louise, Brussels, Bel-

Bill Plummer, X, 120 West Jersey Street, Elizabeth, N. J., some time ago wrote: "Saw Herb Kaufman, X, in Carteret, N. J. He is with the Union Smelting & Refining Co. Bob Felsenthal, X, was in the office of S. W. Straus (Bonds) in Chicago. Siegfried, XIII, migrated to Pittsburgh and changed from a naval architect to a chemical engineer. He is now an invaluable asset to the Hard Rubber Department of the Westing-

house Company."
Philip H. Hatch, VI, 425 Pelham Manor Road, Pelham Manor, N. Y., after leaving the 'Stute, became a student engineer on testing with General Electric Company, Schenectady, N. Y. He is now in the Inspection Department of the N. Y., N. H. & H. R.R. at New York.

Francis Bowen Kittredge, I, 7008 Brighton Road, Ben Ayon, Pittsburgh, Pa., started as a draftsman for the McClintic Marshall Construction Co., Pittsburgh, Pa., and when last heard from was engineer with the Pittsburgh Construction Co.,

808 Diamond Bank Bldg., Pittsburgh, Pa.

Don Blanchard Lovis, XV, 26 Adelaide Street, Jamaica Plain, Mass., is with the New England Tel. & Tel. Co., General Engineering Department, on budgets, appraisals, cost studies,

De Witt William Bennett, X, Schultz, Baujan & Co., Beardstown, Ill., is a cereal chemist with Schultz, Baujan & Co. flour mill at Beardstown, Illinois.

Harold O. Bixby, II, is 2nd Lieutenant, C. A. C., Battery A, 61st Anti-Aircraft Artillery, stationed at Fortress Monroe, Va. Edward W. Booth, IX-B, 24 Selkirk Road, Brookline, started as a shift operator on a cracking plant with the New England Oil Refining Co., at Fall River and then was assistant to the consulting engineer for the same company.

to the consulting engineer for the same company. Scripps is

now with the Cities Service Company in Boston. He is listed

as a Sales Engineer, whatever that may be.

Leonard P. Botting, IV, 203 Parkside Avenue, Brooklyn, N. Y., is a designer for Robert D. Koln & Associate Architects, 56 West 45th Street, New York City. Len usually spends the summer as a physical director of a camp (f) and thereby makes enough to keep him amidst white lights and late hours during the winter.

Bradley A. Ilsley, 2039 East 107th Street, Cleveland, Ohio, is doing production and engineering work with the Industrial Fibre Co., manufacturers of artificial silk. Brad writes: "I see Forrester Clements, IX-B, now and then. He is selling chemical supplies, also Hugh Pierson who is with W. S. Tyler Co. Walter Jayme, III, is in Canton, Ohio, with the United Steel Alloy Co., metallurgical department."

Warren K. Brimblecon, XII, 28 Oswego Street, Springfield, Mass., was a transitman for the City of Newton, Engineering Department. He later joined the H. P. Converse Construction

Company, of Boston.

Reginald G. Burr, VI, Casa del Trolley, Ponce, Porto Rico, after spending some time in the Statistics Department of Stone & Webster, joined the Ponce Electric Company as Assistant Superintendent in Porto Rico. Reg says if you want to live in a first-class place where there are "lots of A-1 things and many good times, just hie thyself to Porto Rico."

To close for this month, if you have received a letter from me recently and you haven't Done It Yet—DO IT NOW!

1922

Eric F. Hodgins, General Secretary, Room 3-205, M. I. T.

Course I

J. F. Hennessy, Secretary, 16 Henry St., Brookline, Mass.

On October 10, J. F. Pierce was married to Miss Ruth Torrey, at Rockland, Mass.

Al Hayes has been coaching athletics at Johnson High of

North Andover this year.

Cook is engaged on highway construction for the State of Illinois.

Course IV

George S. Holderness, Secretary, 17 Gramercy Park, New York City

After another period practically devoid of correspondence from the architects of 1922, we feel very much in the position of the travelling salesman who was known by his children merely as "the man who comes to see Mamma every week-end." It seems that before long we are going to have to send out engraved cards introducing ourself as Course Secretary in order to assure the classmates that a letter to us will place the news of their doings in reliable and authorized hands. For surely a letter to The Review which is based on the manuscript of the various class-members is preferable to the enforced outcroppings of the Secretary's imagination.

At this writing we are offering a choice collection of notes divided between the authoritative and the imaginative on about a fifty-fifty basis. Something like the man who made sausage of rabbit and horse meat on a fifty-fifty mixture - one rabbit

to one horse.

In New York, which happens by the merest chance to be our post-office at this time, there are two favorite indoor sports for draftsmen, and all of the Rogers vintage of '22 are busy at one of them for seven hours a day. We refer, of course, to drafting. We all have jobs, which is no small thing in these days of street-walking and work-hunting. A close scrutiny, however, would reveal some slight changes in the formidable list of business connections we have made. For example, but not necessarily apropos of indoor sports, Marion Dimmock has severed his relations with Otis and Willie Post (George's sons), and has become installed in a comfortable berth with one J. É. R. Carpenter, as an authority on hotels. He of the "back to France" complex took a short vacation in the South, and — this is strictly sub-rosa - rumor has it that he has done a lot of training to reduce his girth to the maximum possible for proximity to a drafting table. But don't breathe it to a soul!

Al Pierce is connected with Mott B. Schmidt, who is architectural attaché to the Vanderbilts, and does his pencil-pushing at 14 East 46th Street. By an odd stroke of fate Al, Ross Wiggs, Chris Carven, Hemmy, and Roz Pfohl are working within a block of our own office, which is a rather singular situation in

a city of New York's proportions, eh what? If our memory serves us correctly our large group of readers already have been apprised of the presence of Cass Amon in the office of Delano and Aldrich. Which brings us to the matter

BRINGING MORE DAYLIGHT INTO INDUSTRIAL BUILDINGS.

Dr. George M. Price, writing on "The Importance of Light in Factories," in "The Modern Factory," states: "Light is an essential working condition in all industrial establishments, and is also of paramount influence in the preservation of the health of the workers. There is no condition within industrial establishments to which so little attention is given as proper lighting and illumination. Especially is this the case in many of the factories in the United States. A prominent investigator, who had extensive opportunities to make observations of industrial establishments in Europe as well as in America, states: "I have seen so many mills and other works miserably lighted, that bad light is the most conspicuous and general defect of American factory premises."

"My own investigations for the New York State Factory Commission support this view. In these investigations it was found that 36.7% of the laundries inspected, 49.2% of the candy factories, 48.4% of the printing places, 50% of the chemical establishments, were inadequately lighted. There was hardly a trade investigated without finding a large number of inadequately lighted establishments."

Inadequate and defective lighting of industrial buildings is not confined to the establishments in New York State alone. The same conditions prevail in most sections of the country.

Such conditions as mentioned above are entirely opposed to the laws of health, sanitation and efficiency. Wherever poor lighting conditions prevail, there must be a corresponding loss of efficiency and output both in quality and in quantity. American industry is not using nearly enough daylight and sunlight in its buildings. Every endeavor should be made to use as much as possible of daylight for lighting purposes. To obtain this it is of course necessary that the rays of daylight and sunlight are permitted to enter the interior of the buildings as freely as possible, with the important modification that the direct rays of the sun must be properly diffused to prevent glare and eyestrain. A glass especially made for this purpose is known as Factrolite, and is recommended for the windows of industrial plants. Windows should be kept clean if the maximum amount of daylight is to pass through the glass, but the effort will be well repaid by the benefits secured.

In the presence of poor lighting, we cannot expect men to work with the same enthusiasm as when a well lighted working place has been provided. The physical surroundings have a deep effect upon the sentiments of the employes, and where bad working conditions are allowed to prevail, there is invariably a lessening of morale and satisfaction created thereby. Neglecting to utilize what nature has so bounteously provided, daylight, and which is so essential toward industrial efficiency, we have an instance of wastefulness, but now that the importance of good lighting is becoming recognized, undoubtedly more attention will be given by progressive industrial employers to furnishing the means which are essential for their workers to secure and maintain the efficiency, which counts for so much in the success of any industrial concern in this competitive age.

If you are interested in the distribution of light through Factrolite, we will send you a copy of Laboratory Report-"Factrolited."

MISSISSIPPI WIRE GLASS CO.,

220 Fifth Avenue,

New York. St. Louis. Chicago.

of the latest honor which has befallen our coterie here in the For there is honor, even among draftsmen. the wreath of nice green laurel goes to Cass for capturing the berries in the latest B. A. I. D. judgment. Those of you who have read the name of W. R. Amon in the journals of the profession may know that it is none other than our rotund and genial squirrel-shooter from Kentucky. The subject was "A fession may know that it is none other than our rotund and genial squirrel-shooter from Kentucky. The subject was "A Library in a City," and Cass delivered the coup-de-grace to his opponents with a choice Romanesque façade, and a nifty assortment of axes, circulations, and suppressed editions. The current problem is the inside of a cabaret, which Cass is not doing. He confided to us that this is a subject on which he needs a little brushing-up. Personally, if we could win a First Medal in anything, we should run up to New York University and perch in the Hall of Fame, and call our life a success.

Speaking of competition and such matters our little town.

Speaking of competition and such matters, our little town here on the Hudson has just registered a victory over Saint Paul, scoring heavily on two counts. The first is that Emmy Stickney has been reclaimed from a voluntary exile in that frontier settlement, and is back again with Electus Litchfield on Fifth Avenue, and living over in Englewood, New Jersey. The second Avenue, and living over in Englewood, New Jersey. The second is a similar move on the part of Rudie Blatter, who early in the summer felt the call of the wild, and pressed westward with a band of pioneers who were motoring to Minneapolis' step-brother. Recently, however, Rudie pressed the Pullman cushions in the general direction of New York City, and we now find that he has forsworn the tenets of his short-haired faith and is duly mustered in with Andrew Thomas as an orthodox architectural More power to him!

There is little else to relate of activities in Gotham, save that Roz Pfohl is registered at 30 Grove Street (in the Village), and that the author of this gem still is on the pay roll of John Russell Pope. Let us leave New York, then, to its own devices, and may the Devil take the hindmost!

In the beginning we lamented the epidemic of Writers' Cramp that seems to have the class so firmly in its clutch. At this very point let us make one exception to this indictment. The member of the class who is at a distance from us greater than the combined mileage of all of the rest has favored us with more voluntary correspondence than all of the other 1922 architects taken together. The retentive memory of Ilya Georgevitch enables him to bear in mind that a certain member of the class

PRINTING

An industry requiring an appreciation of the fine arts.

An industry requiring expert technical knowledge and mechanical ability.

An industry requiring an understanding of the sales problems of all industries.

When you buy printing, buy it where all the requirements of the industry are fulfilled.

The Murray Printing Company

At Kendall Square Cambridge

was elected permanent secretary for Course IV, and his sense of class attachment prompts him to keep that member informed of his maneuvers. And so we find that Ilya is in the middle of his army enlistment, mentioned in the last letter, and within a few months he is going to be Captain Georgevitch of the Serbian Army. In the Engineering Corps, he still is doing architectural work of the kind needed by the government, and finds a pleasant harmony in the combination of the two professions. He writes, however, that he is very lonesome for his old class at Rogers, and will be awfully glad to hear from them. A few minutes of the time of any of us used in writing a line or so to the Serb for old times' sake will be well spent, and deeply appreciated at the other end. Address, Ilya Georgevitch, Architect, Zaitchar,

We were pretty gosh-durned glad to hear from Baltimore recently to the effect that Baldy—yes, little Howard Frazier Baldwin,—is hooked up with Parker, Thomas, and Rice in that city and is going great guns. He has his mother and sister with him, to say nothing of a coupe of some make or other, and reports that with the assistance of the latter he can get about easily and pick up a lot of good acquaintances. Baldy says Baltimore is an ideal city because it has so many of the fine points of the South with so few of the bad ones of the North. Slick Schley is still there also, and, besides following the profession, has given a good account of himself in the ancient and expensive game of golf. Bob Coupland is in New Orleans, and the report comes to us that he is following the insurance business, although we would not make affidavit to that effect. In Boston we find among our ex-colleagues a strange collection of pursuits, including the honorable callings of student and teacher. Dave Shotwell, the faithful old watch-dog of the Architectural Society treasury, is doing his stuff in Ferrand's graduate outfit, and Muggins Mall city and is going great guns. He has his mother and sister with is doing his stuff in Ferrand's graduate outfit, and Muggins Mall Vignoles is instructing the gentler sex at Wellesley in the occultisms of art. Florence Stiles has become a regular designer (which is more than most of us can say) for Monks and Johnson, but we suspect that unless her tendencies have changed, Florence's chief designs are always on the particular meal which

happens to be next.

Warren Ferguson is doing structural steel designing for Lord & Burnham, who manufacture greenhouses. He makes his headquarters in Boston, making an occasional visit to the main

works at Irvington, just up the river from New York City.

And did you know that Margie is back? Well, she is! And I said to Margie, "what kind of water do they have in France and Italy?" And Margie said to me, "I don't know, I never tried it.

Perhaps most of you have read, by this time, of the death of Bert Weber's father in Chicago. The news was a distinct shock to us, and we feel safe in expressing for the class its deep regret of Bert's loss, and its fullest sympathy for him and his family in their sadness. Bert has left Howard Shaw, and will continue the architectural practice of his father in their old offices in the Fisher Building, Chicago.

We have tried in these paragraphs to tell you the news, both good and bad. Some of it we have condensed, while some of it, we must admit, is rather drawn out and padded with extraneous

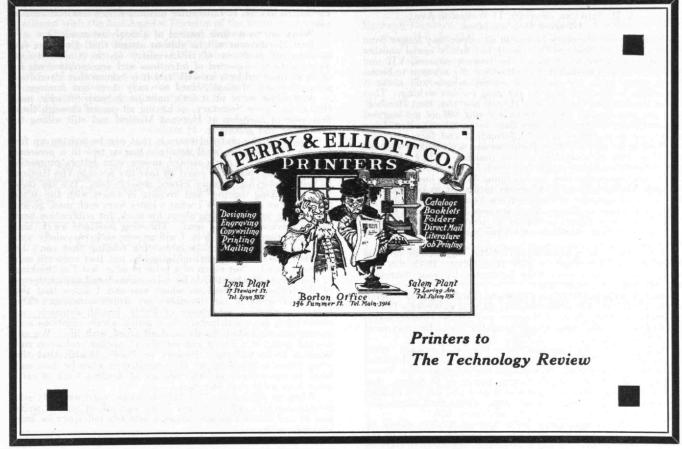
we must admit, is rather drawn out and padded with extraneous phraseology. Those who have a distaste for verbosity and kindred growths can do much to remedy this ill by supplying us with some real concrete, three-dimension facts about themselves before the next report must be dropped in the mail box

And now we see it is getting late, so we shall dispense with the usual bedtime story, and close our program with the announcement that an Architects' Dinner will be held at the Technology Club on or about December tenth, with Professor Emerson present. We are now signing off until two months hence, when we again shall broadcast through Station M. I. T. Good Night.

Courses V and X

S. Parker McConnell, Secretary, 187½ Fairview Ave., Jersey City, N. J.

Contrary to my usual custom I do not introduce my notes this month with a short but snappy apology for their lack of real news of who's who in Courses V and X. The gods and boys both have been exceeding gracious and kind of late, and as a result I am starting the job armed with more than the usual healthy imagination. A few have consented to get married; one is about to be married; and several have taken new jobs or at least they are new to me in just hearing of them. If you boys knew of the joyful abandon with which I gloat over your engagements and weddings. I am positive more of you would engagements and weddings, I am positive more of you would step out and do your duty by society. And it is really not because I am not interested in your future peace of mind and spiritual freedom — not that at all. It's just that it all means news for our cherished Technology Review.



First of all regarding those more adventurous ones who have been playing fast and loose with Hymen.

I have at hand a clipping from the Des Moines Tribune of October 4, 1923, telling us of the marriage of Miss Ruth Harriet Wilson and Mr. Owen Gregg Wilson, Jr. "The bride is a graduate of the University of Chicago and since her graduation has been associated with the home economics department of Iowa State College and Michigan State College." "They are planning to live in Port Arthur, Texas, where O. G. has been working with the Gulf Refining Company since his graduation from Tech."

A letter which I received from Bill Taft the other day is authority for the meager information that Roger Ingalls is married and living in Yonkers. The adjective meager is advised; my correspondent gave me only the bare fact, erroneously assuming that I knew the details.

It would seem that Dave Minton is always going somewhere or doing something that rates him a place in the columns of The Review. But this time he has gone and done "somethin' as is somethin'" and all the other achievements of his career fade into comparative insignificance. Yes — you have guessed it — he, too, is married. His bride was Miss Emily Locke Breaux of Louisville, Ky., and the wedding occurred down there on November 7. Your correspondent has the honor of knowing Miss Breaux — I mean Mrs. Minton — and so can appreciate fully just how completely Dame Fortune and Dan Cupid combined to make Dave the "happiest man in the world." They are going to make their home in Beverly Hills, California.

To all three of these coursemates of ours who have gone and done it, we extend our heartiest congratulations and most sincere good wishes for a happy and prosperous married life.

Tom Berlage is engaged. The following from the Boston Transcript of the middle of November speaks for itself. "Mr. and Mrs. George A. Page of Chestnut Hill announce the engagement of their daughter, Miss Helen Bruce Page, to Thomas N. Berlage, son of Mrs. Robert E. Fellner of London, England. Miss Page was one of the debutantes of the season of 1920–21 when she was introduced at a ball at the Copley-Plaza. She is a graduate of a Boston private school and is a member of the Junior League. Mr. Berlage prepared at Rugby and was graduated from M. I. T. in the Class of 1922. He is now in business

in St. Louis, Mo." We rejoice with you, Tom, in your good fortune and want to offer you our congratulations.

Bill Taft's letter, already referred to, contained several items of general interest. He is living at 44 West 12th Street, New York City and working in the lab of the National Sugar Refining Company in Yonkers. His work, he says, is a combination of lab routine and research. He seems to feel that all roads in the sugar game lead either to or through Cuba, and so, for evident reasons, he is staying with it and living in hopes.

Eddie Kohler has gone into Park & Tilford's. Quoting Bill verbatim, "The last time I saw him, he had been playing around with perfumes and smelled like an expensive edition of Woolworth's best. He would be highly insulted at the comparison." That's your reward, Eddie, for not letting us hear from you. "Erb Dittenhofer, after recovering from his efforts in X-A by a trip to Europe, is now learning the stocking game with the Gotham Hose."

About a month ago I received a letter from Os True. It was newsy but at the same time vividly interesting, if you know what I mean. I would like to give you that letter word for word, for it is good; "our boy Os" is just as gifted in front of an Underwood as he is with a Steinway. But grim necessity requires that I delete some of the finer parts 'cause if I don't, Eric will. But the news of the class which his letter held ran as follows: "Leo Carlsmith is working in Roaring Springs, Pa., for the Melite Company. Roger Hunneman is with the Standard Oil Co. of Indiana at Whiting, Ind., —living in Chicago, I believe. Heine Wagner is with the Iroquois Gas at Buffalo, along with Ray Mann. I am with the Sinclair Oil at Chester, Pa. Am expecting Tyson to join me here soon. My address is Wolley Still Farm, Chester, Pa., —but I really haven't taken up farming nor am I running a still."

Walking into a restaurant down in Bayonne, N. J., the other day, I bumped into N. J. Epstein. He is doing Chemical Engineering research for the Herrick Boigt Company. He told me he was living with Joshua Tamer at 522 West 136th Street, New York City. Tamer is serving the Crucible Steel Company of Jersey City in the capacity of chemist.

I heard indirectly of Bill Noyes recently. He is with Harris-Forbes & Company in New York City in the bond selling department.

Course VII

A. H. Stevens, Secretary, 11 Wollaston Ave., Arlington Heights, Mass.

Arlington Heights, Mass.

Your Course Secretary is unable to refrain any longer from his duties. Eric Hodgins has gently but firmly issued another official request for notes under the Roman numeral VII and this time there is enough news to frustrate my attempt to blame blank space upon our biological correspondents and make it impossible to pass the buck to the gang for not writing. That doesn't mean you, though, Ray Hewes, nor you, Bert Hershenson, nor you, Radish Radin, because if you will not get married or something, we can only speculate as to what you're doing unless we have letters giving information and facts.

Now in the case of Squirt Perins we can say, right off without thinking, that he's washing dishes tonight. Why? Because he's married, and that makes it a cinch for the Secretary! But before we antagonize him by reminding his wife how biological

before we antagonize him by reminding his wife how biological training can be utilized in domestic duties, let us congratulate Keble on his marriage to Thelma Ruth Young on September 10, 1923, at Dorchester, Mass. They are now "at home" at Chapel Hill, N. C., and Squirt continues to teach at the University of North Carolina. How about a letter, Squirt, telling us more about your work?

Then comes an announcement of the engagement of Miss Helen Rice of Brookline to Bob MacClellan. Both this and the preceding items are tardily forwarded by your Secretary who apologizes for same delay.

And, of course, the veteran husband, Russ Tewksbury, must not be forgotten. He writes, in part: "I'm working for a Doctor of Science at the School of Hygiene and Public Health, Johns Hopkins University, majoring in biometry under Dr. Raymond

Although literally "working for a Doctor of Science" gives the impression of having been recently hired, the additional distinction of receipt of a fellowship from the Rockefeller Foundation, International Health Board, leaves us to believe that dation, International Health Board, leaves us to believe that
Russ is in truth working to get that degree and has the backing
and support given to very capable men. Great stuff, Russ. His
address is 1210 St. Paul Street, Baltimore, Md.
Radish Radin has entered Tufts Medical School. Chalk up
one more vote for Course VII as a pre-medical school. In the
Class of '22, Course VII has four prospective M.D.'s, three of

Technology Branch

Harvard Coöperative Society

We announce the opening of our New Men's Wear Department. During the five months since the fixtures were ordered, we have rearranged the entire store with the purpose of improved service.

We have added many new lines in Men's Wear-Hats, Overcoats, Gloves, Mufflers, Sport Blouses, Sweaters, Sweat Shirts, Vests, Golf Hose, Raincoats, Rubbers, Overshoes, etc.

We intend to have in stock and ready what is wanted.

Let us know your wants.

Your Store Is At Your Service.

whom were in a graduating class totaling eight biologists and the fourth left M. I. T. to enter medical school from his Junior

What say to a clinic instead of a five-year reunion?

Bert Hershenson will be able to attend that clinic too, for as assistant professor of Biochemistry at the University of Virginia, he is suspected of intentions and accomplishments in

other medical subjects as well, and it is known that he visited us at Harvard Medical School to study there last summer.

And while we're at it let's mention Johnny Strieder, and Olefski and your Secretary, as having all passed through their first year of hardship at Harvard Medical and still willing to take year and or the property of the state of the s

first year of hardship at Harvard Medical and still willing to take more and getting it.

That's all the material there is that can be written up for Course VII notes, so we'll devote a line or two to a personal chat. I'm sorry I can't always answer your letters promptly and personally, but wish you'd all take my notes in The Review as being deserving of more letters, nevertheless. It's the only way of sticking together and keeping in touch with the other fellow and so next month I want a letter from each man, giving his address, and something about his work, for publication here in The Review after the next. Throwing lassitude away, and alibis and time away with it, I will answer each personally and perhaps be able to provide interesting reading that can't be put here, for lack of space and intimacy, but that concerns and interests us all. Not much of a prize to offer, but I'm thinking of it in terms of what it'll do for us as a bunch and again in terms of the biological professions where you and I know that the of the biological professions where you and I know that the careers of some of our members are worth watching. The rapidly advancing importance of Public Health demands our rapidly advancing importance of Public Health demands our observation and participation, as a group whose vocations and avocations are linked closely, and all allied with life. We are a small group in a young and rapidly advancing profession and whether it be Industrial Biology or Public Health that the other fellow is following, we are interested in what he does and what he can tell us, and the medium of keeping track of each

other is to write your Secretary.

When we think we're "too busy to write" (and we really are, sometimes) let's ask ourselves if we can afford not to write and let our friendships and common interests fall apart for lack

1923

Course I

J. M. Robbins, Secretary, 42 Oak St., Belmont, Mass.

The Duke of Peru, otherwise known as George Eric Barnes, writes under the snappy letterhead of the University of Florida. It is a wonderful affair in three colors with the name of our hero printed in large capitals. We were greatly disappointed, however, when we discovered that his royal title did not appear. The first part of his letter is quite unprintable. Further along he says, "Mrs. Barnes, Miss Barnes, and I left Boston in a Ford touring car on August 31, and arrived in Gainesville on September 8, covering a distance of 1700 miles; one new fan belt, one puncture in Savannah, and one day's rain in Virginia, was our total bad luck. I am teaching twenty hours per week, surveying, class and fieldwork, plus two hours railway fieldwork, and two hours assisting in the hydraulic lab. I am getting

considerable kick out of a very congenial job."

Art Davenport reported the other day that he is with Stone Art Davenport reported the other day that he is with Stone & Webster, on a sub-station and transmission line job in Brockton.—Bob Hendrie, Unity Chase, and Gerry Putnam have completed the training course with the telephone people and are now on the job.—Bill Wang is working on concrete design in the Boston office of Stone & Webster.

Allen Parker sends in the following dope on Neck Gilman. "The job he was on was a current survey of Frisco Harbor. The work was continuous—six hours on and twelve hours off.

The job he was on was a current survey of Frisco Harbor. The work was continuous—six hours on and twelve hours off. He even said that the job furnished an occasional thrill, such as dragging the anchor of their launch about a mile through the traffic lane in the middle of the night. The job was a short one and I imagine that by this time G. T. is on his way to D. C." The latter fact is intimated in one of the survey bulletins but a letter from Neck confirming it would not be amiss. Parker continues with a little dope about himself. "At present, I am in Seattle. In fact, I will probably be here all this winter. We finished our work around Juneau about the last of September and left for the South, October 3. We stopped at Thomas Bay to drag the entrance which is nearly closed by a dangerous reef, also a couple of days taking current observations at each end of Wrangell Narrows. We arrived here on the 23d of October and since then have been working on the reduction of our field records—sort of office work, and talk about your office hours, 9.00 to 11.30 and 1.00 to 4.30. These are the outside limits. Absolutely no objection if one wants to go up town in the morn-Absolutely no objection if one wants to go up town in the morning or afternoon on business." We wonder just what Allen includes under the term "business."

Bill LaLonde writes from Los Angeles, where he is now stationed with the Los Angeles Division of the Southern Pacific. His work "consists largely in staking out spur tracks, setting the necessary slope stakes, and perhaps setting the final center stakes and top of rail stakes," We gather that Bill has stakes on the brain.

Martin Burckes has passed the examinations for the Regular Army and expects to join the Field Artillery the first of the year after finishing up at the 'Stute. He hopes to transfer to

the Engineers later.

Course II

Harold B. Gray, Secretary, Vitreous Enameling Co., 6800 Grant St., Cleveland, Ohio

Mac Macorra has gone home to Mexico, where he is going to help his father run his paper mill. We are sorry to see him leave the States, but wish him all kinds of success in the paper

CHARLES H. JOHNSON M. I. T., '05

New England Mutual Life Insurance Company

176 FEDERAL STREET

Main 5571

BOSTON, MASS.

F. P. Montgomery, '02 Pres.

R. J. Marlow, '17, Treas.

F. P. MONTGOMERY & CO. INSURANCE

100 WILLIAM STREET

NEW YORK CITY

Headquarters for LABORATORY APPARATUS AND CHEMICAL REAGENTS

> EIMER & AMEND Established 1851

NEW YORK, N. Y.

Third Ave., 18th to 19th Street



Alteneder **Drawing Instruments**

Appreciated the world over for their excellence and universally used by the expert engineer and architect

Catalogue on Request

Theo. Alteneder & Sons 1217 Spring Garden St., Phila.

Course V

EDWARD DANEHY, Secretary, 25 Sargent St., Cambridge, Mass.

Herm Bruson, Bill Gallup, and Charlie Moore are studying at the Polytechnic Institute of Zurich. Herm is investigating heterocyclic compounds for Professor Studinger. Bill and Charlie are under Dr. Fieiz, who has Bill working on his favorite subjects, dyes and textiles.

It might be well to mention that Haebler, '22, V, and Mrs. Haebler are members of the M. I. T. Colony at Zurich. Haebler,

however, is at the University of Zurich.

The above-mentioned boys hope to be renowned Ph.D.'s in due time. We sure wish them the best of luck.

Since graduation, Helen Miller has travelled a good deal.

THE ATLANTIC WORKS

Incorporated 1853

BORDER, MAVERICK AND NEW STREETS, EAST BOSTON

Builders of Stationary and Marine Boilers

Steamships, Towboats, Steam Yachts and Heavy Machinery

SAMSON CORDAGE WORKS

MANUFACTURERS OF BRAIDED CORDAGE AND COTTON TWINES



LINES, SMALL LINES ETC. SEND FOR CATALOG

BOSTON (MA55.

MERRIMAC CHEMICAL CO.

148 STATE STREET, BOSTON, MASSACHUSETTS

WORKS AT WOBURN AND EVERETT, MASSACHUSETTS

THE largest and oldest chemical concern I in New England.

FOUNDED IN 1853



Spaulding-Moss Company

Manufacturing Blue Printers Photostat and Litho Prints Drawing and Artist Supplies

A. H. SPAULDING '14 P. B. TERRY '13

42 Franklin Street BOSTON Tel. Main 6000



GENERAL RADIO CO.

Manufacturers of

Radio and Electrical Laboratory Apparatus MASSACHUSETTS CAMBRIDGE

BULLETIN H SENT ON REQUEST

Classified Advertising

Mail may be addressed to a Box Number in care of this magazine and will be promptly forwarded to the Advertiser. Other than this, the Review assumes no obligation. Such address counts as five words.

RATES-Positions Vacant: No display, 6 cents per word, minimum charge \$1.50, payable in advance.

Positions Wanted: No display, 3 cents per word, minimum charge \$0.75, payable in advance.

Display advertising is charged at regular advertising rates, which will be furnished on application.

The "Positions Wanted" Column is open only to Members of the Alumni Association in good standing.

Positions Vacant

A LARGE manufacturer of glass containers, located in the Middle West, is anxious to get in touch with Mechanical and Chemical Engineers who have been graduated from five to ten years, for positions in a growing industry. For men of promise who are not afraid to work there is a splendid opportunity with this concern. Address Technology Review, Box 3048.

ALARGE mutual insurance company offers an opportunity for a mature engineer with a varied experience in industry, who is desirous of entering the insurance field. A previous knowledge of insurance is desirable but not necessary, the essential thing being a pleasing approach and the ability to meet and hold the attention and respect of manufacturing executives. Address Technology Review, Box 3051.

ALARGE, nationally advertised company is looking for a man with technical training and some general business experience in real estate, legal matters, contracts, specifications, etc. This man is wanted for the department having charge of buildings and equipment of various branch factories scattered throughout the United States. It is essential that the successful candidate must be able to assume responsibility and act quickly upon his own initiative, as he will be confronted with frequent emergencies. Address Technology Review, Box 3054.

ANEW ENGLAND public service company is desirous of finding a cadet chemist for its plant. This opportunity is a very good one for a young chemist and advancement for a capable man will be as rapid as his merit calls for. Address Technology Review, Box 3056.

A POSITION is open for a safety engineer with an insurance company located in Boston for a man who has good appearance, personality, tact and selling ability, knowledge of industrial safety, and who is at least 25 years old. For a man who can qualify, the starting salary will be at least \$200.00 a month. Address Technology Review, Box 3055.

A WELL-KNOWN manufacturer of small tools is looking for several young men who have been graduated from Technology for one or two years to work in their production department. This is an exceptional opportunity to connect with a reputable firm which will reward ability and faithful service with steady promotion. Address Technology Review, Box 3052.

COLLEGE man about 26 or 27 years of age, who has a good personality and technical training along business and economic lines, is wanted to come into a marketing organization at a salary of not over \$15.00 a month to start. If the man selected is found worthy, he will be placed in charge of this marketing department at the end of six months or a year, with a substantially increased salary. Location, West Virginia. Address Technology Review, Box 3053.

EXCELLENT opportunity for young graduate who has had some sales research work and who is experienced in marketing, to act as a secretary in the office of a well-known firm of silk manufacturers. Candidate should make a specially good appearance; have a taste for fine fabrics; have a working knowledge of French; be a rapid stenographer; and be able to summarize the essential parts of an address. Man who is single and of the Latin type is preferred. Salary depends upon experience and qualifications. No applications are wanted from men who do not feel confident that they can satisfy the above specifications. Address Technology Review, Box 3046.

1923 Continued

We surmise that Helen has been trying to find a place as entertaining as Tech. She is now residing at her home in Brookline. Count Seymore is putting in his time at the duPont plant

Count Seymore is putting in his time at the duPont plant in Parlin, N.J. Count is fast becoming an expert on cellulose, which is the material handled at this plant.

B. O. Stewart is located in New York with the Atkins Company, sugar merchants. He sends out favorable reports on life in the big town.

Duke Tetlow scans over the movie films out in Brookline at the plant of the Technicolor Company. It is rumored that he is the man who is going to give us perfect colored movies.

Paul Culhane finds that studying at Northwestern University is quite pleasant. He is working under Dr. Whitmore and hopes that his work on organic compounds of mercury will bring him fame and the much-desired Ph.D.

Warren Center, Harry Nanijian and Charlie Roche are assistants at the Institute this year. Warren has aspirations for a Ph.D. and Harry property teather in the March Ma

Warren Center, Harry Nanijian and Charlie Roche are assistants at the Institute this year. Warren has aspirations for a Ph.D. and Harry expects to gather in an M. S. next June.

Nyi has recovered from his illness and expects to complete his studies this year.

Positions Wanted

GRADUATE with over twenty years' experience in mechanical and automotive engineering combined with executive duties is available for a connection as general manager of a moderate sized business, preferably in the metal or automotive line. Thoroughly competent to direct manufacturing and sales and can show a successful record of eight years as a general manager. Address Technology Review, Box 4009.

MECHANICAL Engineer with ten years' experience, at present engaged as chief mechanical engineer for a very large New England manufacturing concern, is desirous of finding an opportunity for increased responsibility and consequent earning power. Can show first-class record, having been with the same firm since graduation. Address Technology Review, Box 4003.

NINETEEN HUNDRED AND NINE graduate with a broad engineering and administrative experience is seeking a permanent connection as an executive in a well-established manufacturing business. Can furnish exceptional references and is willing to locate in any part of the United States. Unless opportunity offered is very exceptional, \$500 per month will be the minimum salary considered. Address Technology Review, Box 4007.

PLANT Manager or Executive—Technology graduate in Mechanical Engineering with twelve years' experience in operation of large machine shop with grey iron foundry on light and medium quantity and quality work desires change. Thoroughly conversant with all branches of plant management, including engineering, purchasing, production, power generation, maintenance, insurance, etc. At present employed. Address Technology Review, Box 2054.

Course VI

Albert J. Pyle, Secretary, Utah Power & Light Co., Grace, Idaho

I believe about twenty men came to General Electric at Schenectady, to enlist in the wrench, pliers and screw-driver brigade, otherwise known as test men. These were quickly distributed among the one hundred thirty odd buildings of the largest electrical manufacturing plant in the world — which emphasizes their temporary eclipse from the engineering profession. Several, however, proved too restless for the Master of Darkness. Fred Travers was seen, soon after his appearance in Schenectady, crossing the company streets with handsfull of large radio and power tubes, and let it be known he was on special research work.

Billy Hahn, who in collaboration with Johnnie Keenan, invented the system of current regeneration that was to enable the Boston "L" to come down to a five-cent fare, pushed his way past the private office detectives and spieled his story to the powers at Schenectady. They listened thoughtfully and did not publish their decisions. Anyhow, Billy rode his motorcycle over to Pittsfield and is planning a rapid descent upon the other General Electric plants.

Tommy Rounds, the original Technology circus advertise ment, found Schenectady getting on his nerves and induced Mr. Stearns, of the railway engineering department, to let him help build the 3,000-volt electric locomotives at Erie, Pa., for the Mexican railways. We expect to hear of guaranteed schedules in Mexico.

The Schenectady gang showed one invincible quality—perseverance. It earned the title of Chow Champs for being the first to break into the guarded interior of the lunch hall. No one was permitted within one hundred feet of the doorway until the whistle blew, but after that whistle! More than one good men played martyr to Epicurus in that awful rush for a three-foot opening. It was like trying to compress water, to let streams of men from three different quarters try to enter simultaneously or presimultaneously. Some went up and some went down, but the biggest went on forever.

Our inimitable Mr. Bibber came to the Schenectady Works,

Our inimitable Mr. Bibber came to the Schenectady Works, to offset the plagues of teaching with some real hard work. He took Sunday dinner with some of the '23 men and entertained them with stories of electrical genius.

George Bricker, the Technology financier, shed his collar

Professional Cards

A Directory of Technology Graduates and Other Qualified Engineers

FAY. SPOFFORD & THORNDIKE CONSULTING ENGINEERS

200 DEVONSHIRE STREET, BOSTON

INVESTIGATIONS

REPORTS

DESIGNS

ENGINEERING SUPERVISION

ENGINEERING MANAGEMENT

VALUATIONS

BUILDINGS

FOUNDATIONS

INDUSTRIAL PLANTS

PORT DEVELOPMENTS RIVER AND HARBOR WORKS

HYDRAULIC DEVELOPMENTS

WATER AND SEWERAGE SYSTEM

STANLEY G. H. FITCH

CERTIFIED PUBLIC ACCOUNTANT 131 State Street Boston, Mass.

of PATTERSON, TEELE & DENNIS New York, Boston, Washington and Baltimore

WILLIAM T. REED COMPANY

BUILDING CONSTRUCTION

200 DEVONSHIRE STREET

BOSTON 9. MASS.

CHARLES S. GOODING, '79

Solicitor of Patents Mechanical Engineer

27 SCHOOL STREET

BOSTON 9

FORMERLY MEMBER EXAMINING CORPS - U. S. PATENT OFFICE

SAMUEL SIEGEL

M. I. T '17

GEORGETOWN LAW SCHOOL '21

SOLICITOR OF PATENTS

1 BEACON ST.

BOSTON

1923 Continued

and coat for a few long sessions last summer with the big steam turbines in the New York Edison plants. We haven't heard which emerged hotter, he or the steam. He is now at the Harvard Graduate School of Business and, we trust, he has cooled off.

Joe Cox, designated The Typical Engineer last Senior Week, is with Westinghouse in New York City. We have yet to hear about his typical actions in the metropolis.

J. K. Clapp and R. V. Taylor are employed as assistants in the Electrical Engineering Department at Tech.

Ed Thimme was the only man, out of that big hopeful bunch

Ed Thimme was the only man, out of that big hopeful bunch that interviewed the representatives of the Public Service Corporation of New Jersey, to land an appointment. He is located in Paterson, N. J.

A. J. Tigges is associated with the consulting engineering firm of Jackson & Moreland in Boston. Tigges is a hard worker

and earns all he gets.

That's all I've heard from the gang for a month, but I am expecting to be flooded with mail from the old guard from now on. In fact, I am contemplating hiring a secretary to handle my correspondence, so see that you keep her busy, boys.

METCALF & EDDY 14 BEACON STREET, BOSTON, MASS. Consulting Engineers

LEONARD METCALF, '92 HARRISON P. EDDY CHARLES W. SHERMAN, '90 ALMON L. FALES FRANK A. MARSTON

Water Works, Sewerage Works, Industrial Wastes, Municipal Refuse, Drainage, Flood Protection, Supervision of Construction and Operation, Valuations, Laboratory for Chemical and Biological Analyses.

CHARLES T. MAIN

ENGINEER

200 DEVONSHIRE STREET, BOSTON, MASS.

Dugald C. Jackson

Edward L. Moreland

JACKSON & MORELAND CONSULTING ENGINEERS

387 WASHINGTON ST.

BOSTON, MASS.

GEORGE P. DIKE

Attorney-at-Law and Solicitor of Patents 350 Tremont Building, Boston, Mass.

of MacLEOD, CALVER, COPELAND & DIKE, Boston and Washington

P. F. MAHER, '17

Public Accountant

7 JUSTIN ROAD, BRIGHTON, MASS.

Audits Investigations Systems Tax Returns

ATAHUALPA GUIMARAES

Société Generale.

Paris, France.

Assignments solicited for technical and commercial investigations, inspection of equipment, and general service in all European countries.

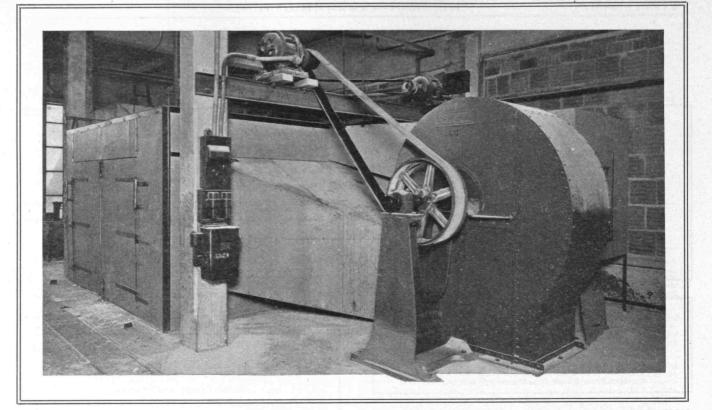
1-24

Course XIV

Frank M. Gentry, Course Secretary, 428 Fayette Park, Lexington, Ky.

Silence! Ye news-monger speaks, let the bull-session remain peaceful until he hath recalled recent wanderings of the tribe. And when thou hast heard, take thee unto thyself a pen and paper and contribute thine own happenings and store of wit to the chronicles of ye course.

Ben Drisko dropped a card from the village of Philadelphia, (he is sojourning with Bell—no, not Liberty Bell—but the Bell Telephone Company of Pennsylvania). He says he has a been working in the engineering department since the last of September. Don't you think he ought to tell us if the engineering department has anything to do with the operating department? He lives at 1310 Pine Street.



Here is a System Designed for Drying Pigments

Photograph shows a Sturtevant Chemical Drying System installed in the plant of one of the foremost manufacturers of printing inks.

It consists of one Design 2 Multivane Fan; four sections of London type Heater; one insulated dryer casing; 18 trucks with the necessary wire grill trays.

Not only does this Sturtevant System embody exactly the correct types of heaters, trucks and trays—but the design, as a whole, is so arranged that the distribution and regulation of the heat and air supply are exactly suited to the materials being dried. The result has proved most satisfactory to the user (name upon request). May we have the opportunity of working with you on the solution of your drying problems.?

B. F. STURTEVANT COMPANY, HYDE PARK, BOSTON, MASS.

Sales Engineering Offices:

Atlanta, Ga.
Boston, Mass.
Buffalo, N. Y.
Camden, N. J.
Chicago, Ill.
Cincinnati, Ohio
Cleveland, Ohio
Dallas, Texas.
Detroit, Mich.
Hartford, Conn.
Indianapolis, Ind.
Los Angeles, Calif.
Minneapolis, Minn.

Plants Located in

Hyde Park, Mass. Sturtevant, Wis. Berkeley, Calif. Framingham, Mass. Camden, N. J. Galt, Ont.



Sales Engineering Offices:

Montreal, P. O.
New York, N. Y.
Pittsburgh, Pa.
Portland, Ore.
Rochester, N. Y.
St. Louis, Mo.
Salt Lake City, Utah
San Francisco, Calif.
Seattle, Wash.
Springfield, Mass.
Toronto, Ont.
Washington, D. C.

757

The

Massachusetts Institute of Technology

CAMBRIDGE, MASS.

The Massachusetts Institute of Technology offers Courses, each of four years' duration, in Civil, Mechanical and Electrical Engineering; Naval Architecture and Marine Engineering; Mining Engineering and Metallurgy and Geology and Geological Engineering; Architecture and Architectural Engineering; Chemistry, Chemical Engineering and Electrochemical Engineering; Biology and Public Health and Sanitary Engineering; Physics, General Science and General Engineering; and in Engineering Administration. These Courses lead to the degree of Bachelor of Science.

To be admitted to the first year class, applicants must have attained the age of seventeen years, and must satisfactorily fulfill entrance requirements in Algebra, Plane and Solid Geometry, Trigonometry, Physics, Chemistry, English, History, and French or German and one elective subject. Examinations are required in all subjects except Chemistry, History and the elective, the requirements for which are fulfilled by the presentation of satisfactory certificates. A division of these entrance subjects between different examination periods is permitted.

Entrance examinations are held at the Institute in September. In June, applicants will be examined by the College Entrance Examination Board in Boston, New York, Philadelphia, Chicago and many other cities in America and Europe. A circular stating times and places is issued in advance by the College Board.

Graduates of colleges and scientific schools of collegiate grade, and in general all applicants presenting satisfactory certificates showing work done at another college corresponding to at least one year's work at the Institute, are admitted, without examination, to such advanced standing as is warranted by their previous training.

Graduate courses leading to the degrees of Master of Science, Master in Architecture, Doctor of Philosophy and Doctor of Science are also offered. Special research Laboratories of Physical Chemistry, Applied Chemistry and Science have been established.

PUBLICATIONS

Bulletins of General Information, Courses of Study, Summer Session, Advanced Study and Research, and the report of the President and the Treasurer.

Any of the above-named publications will be mailed free on application

For Bulletins and Information address

MASSACHUSETTS INSTITUTE OF TECHNOLOGY CAMBRIDGE 39, MASS.

DWIGHT P. ROBINSON & COMPANY

ENGINEERS AND CONSTRUCTORS

Design and Construct

Hydro Electric Developments

Steam Power Plants

Industrial Plants

Railroad Shops

Construct
Office and Apartment
Buildings

125 East 46th Street New York

Chicago Philadelphia Youngstown Atlanta
Los Angeles Montreal Rio de Janeiro